

**Office of River Protection  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
August 16, 2012**

Approval: Jane A. Hedges by John B. Prii Date: 9/13/2012  
**J.A. Hedges**  
*Ecology IAMIT Representative*

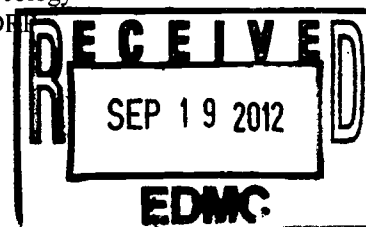
Approval: T.W. Fletcher Date: 9/19/12  
**T.W. Fletcher**  
*DOE IAMIT Representative*

Approval: D.A. Faulk Date: 9/17/12  
**D.A. Faulk**  
*EPA IAMIT Representative*

Minutes Prepared by: T.W. Noland Date: 9/19/12  
**T.W. Noland**  
*Mission Support Alliance*

Abdul, W.	ORP	Lynch, J.J.*	ORP
Barnes, M.W.*	Ecology	Lyon, J.J.*	Ecology
Biyani, R. K.	Ecology	Mathey, J.*	Ecology
Bohnee, G.	NPT	Mattlin, E.M.*	ORP
Caggiano, J.A.*	Ecology	McDonald, D.*	Ecology
Charboneau, S.L.	ORP	Miera F.R.*	WRPS
Cimon, S.*	ODE	Nachbaur, S.*	ORP
Dahl, S.L.	Ecology	Nazarali, A.	CTUIR
Diediker, J.A.*	ORP	Niles, K.	OOE
Donnelly J.W.	WRPS	Noland, T.W.*	MSA
Dowell, J.A.*	RL	Noyes, D.L.*	ORP
Eberlein, S.J.	WRPS	Olsen, G.B.	ORP
Faulk, D.A.	EPA	Peloquin, M.G.*	WRPS
Fletcher, T.W.*	ORP	Pfaff, S.H.*	ORP
Grindstaff, J.F.	ORP	Piippo, R.E.*	MSA
Harrington, C.C.*	ORP	Price, J.B.*	Ecology
Harris, S.	CTUIR	Russell, R.W.	ORP
Hedges, J.*	Ecology	Skinnarland, R.R.	Ecology
Higgins, K.L.*	ORP	Smith, D.M.*	ORP
Huffman, L.A.	ORP	Teimouri, A.E.	HQ
Jim, R.	Yakama	Trenchard, G.D.	ORP
Johnson, J.M.*	ORP	Uziemblo, N.H.*	Ecology
Kaldor, R.A.*	MSA	Vanni, J.*	Yakama
Kemp, C.J.*	ORP	Whalen, C.L.*	Ecology
Killoy, S.E.*	WRPS	Woody, W.K.*	ORP
Knox, K.E.*	KCR	Administrative Record	
Lobos, R.A.*	EPA		
Luke, J.J.*	WRPS		

\*Attendees



**Office of River Protection  
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**TPA/CD Statistics/Status**

ORP provided a handout today listing the agreements, issues and actions that are generated and updated during the ORP monthly project managers meeting. ORP noted the most recent issue, No. 2, regarding a schedule associated with milestone M-062-40ZZ that was requested by Ecology (see discussion below under Supplemental Treatment). ORP also noted that recent items to be entered into the Administrative Record (AR) are included on the handout.

ORP stated that all of the milestones in the Consent Decree (CD) report for FY12 and 13 are ongoing. ORP noted that the most recent deliverable for a semi-annual report was submitted on July 27, 2012. ORP reported that TPA milestone M-047-06 was missed. A notice of violation and a stipulated penalty was issued by Ecology, and ORP has paid the penalty. The status of TPA milestone M-090-11 is to be missed, and ORP is working a path forward with Ecology on the milestone. There are several target dates that are at risk based on the current initial budget planning for FY13. When more budget information is gathered, ORP will hold discussions with Ecology to work a path forward.

**Single-Shell Tank Corrective Action; Milestone M-45, -50, -60**

M-045-20 - ORP noted that this milestone was recently approved to submit an interim measure investigation work plan to Ecology. The milestone is on track for submittal by December 31, 2012. The M-045-21 and 22 series of milestones are based on the M-045-20 milestone and are currently on track.

M-045-58 - ORP reported that this milestone has been completed, and Ecology is preparing a milestone completion letter.

Issues - ORP noted that there could be some constraints with funding for out-year milestones, and more detail will be provided to Ecology when the initial planning for FY13 is completed. Ecology asked if that discussion will take place no later than October 2012, and ORP concurred.

**M-45-00 Series:**

SST Retrieval and Closure Program TPA - ORP stated that M-045-80, -81, -100 and -101 have been completed, which represented a major effort. ORP noted that an executive summary of the document associated with M-045-101 (report on all catch tanks and associated pipelines) is being finalized. ORP and Ecology have agreed to an extension to August 31, 2012 for submittal of the final report. ORP noted that the initial budget guidance for FY13 does not support completion of

the Waste Management Area C Performance Assessment (PA). ORP will provide a briefing on the budget to Ecology in September 2012, as required by the TPA under paragraphs 148/149.

Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria - ORP reported there was no change in status.

Tank Retrievals with Individual Milestones - ORP stated there was no change in status and no work is being done in tanks A-103 or S-112.

C-Farm Critical Path - ORP reported that the 14-day slip for receiving equipment in C-101 was due to the extended reach sluicing system (ERSS) being delivered late. There was no change on C-102 and work continues. There was an 11-day slip in C-104 retrieval due to the AN-106 pump failure, and the pump has been repaired. The 21-day slip in C-105 system installation was due to the garnet versus olivine determination for the cutting method. Tank C-107 had an 11, 17 and 16-day slip due to the P-23 pump failure and the repair at AN-106. ORP noted that the summary line (blue line on handout) for C-107 had a 16-day slip overall to September 2013. There was a 20-day change to C-108 retrieval due to onsite crane availability for retrieval sampling. The sampling was completed and all the samples are at the 222-S lab.

There was a 20-day change in C-109 due to the failed pump, which is also reflected in the summary line. The 4-day change for C-110 was due to the resource availability for delivery of the FoldTrak from the Cold Test facility to Highline for refurbishments. Tank C-111 had a 43-day change due to work by PNNL on the Ramen results and determining a path forward. The 34-day change at C-112 was due to the decision slipping for the hard heel removal (HHR). Work continues in C-112. The delays in C farm infrastructure were due to the AN-106 pump failure.

Ecology inquired about the HHR decision for C-112. ORP responded that a path forward is being determined for the second technology to remove the hard heel. ORP indicated the second technology being considered is two enhanced reach sluicers with high pressure water or an early chemical dissolution followed with the ERSS.

SST Retrieval and Closure CD Milestones and TWRWP Status; D-00B Series - ORP noted that the status for D-00B-01 is ongoing for retrieval of the C farm tanks due by the end of September 2014. ORP added that completion certifications for tanks C-104, C-107 and C-109 are anticipated to be submitted to Ecology in the near future. The dissolution process is finishing up in C-104, and C-109 is in the caustic dissolution phase of the second retrieval method. Ecology asked if the completion certifications would all be submitted at the same time, noting the limited time for review and comment response. ORP responded that Ecology will be provided a draft before submitting the final document.

Significant Past Accomplishments - ORP reported that the ERSSs have been installed in C-101, and retrieval will start this October. The saltwell and thermowell were removed from C-102, and removal of long-length equipment continues.

Tank Waste Retrieval Work Plan (TWRWP) Status - Ecology asked about the status for the C-105 TWRWP. ORP responded that the C-105 TWRWP needs to be revised to adequately describe the Mobile Arm Retrieval System (MARS) vacuum. Ecology expressed appreciation to ORP for its efforts towards keeping Ecology apprised of issues in the field, and with the schedules that have been presented. Ecology stated that ORP's efforts have been helpful in terms of more efficient reviews and responses and with the decision-making process.

242-A Evaporator Status - ORP reported briefly on Ecology's concern regarding the potential that the evaporator could become a single-point failure. ORP is following up on Ecology's concern and has also determined that the white film evaporator will be shelved for about a year. The evaporator is undergoing preventative maintenance and upgrades to ensure future campaigns can be met. ORP added that a major investment of upgrades and preventative maintenance was put into the evaporator with Recovery Act funding, and ORP is committed to ensuring that facility will not be degraded.

### **SST Integrity Assurance; M-45-91**

ORP noted that there are several near-term target dates at risk that support the structural integrity and leak assessment work to support the liner integrity. ORP added the at risk status is based on planning to date for FY13, but the planning is not finalized. To mitigate even more impacts, ORP recently initiated some work activities associated with the sidewall coring in A-106. Planning has been initiated to remove the rebar from the C-107 domes and send them off for testing. Some of the leak assessment work has been restarted, and some work has been deferred to initiate single-shell tank integrity work this fiscal year. Ecology asked if ORP is still on track to meet the 2018 milestone IQRPE certification. ORP responded that there is sufficient float in the schedule to meet the 2018 milestone date, although some of the milestones and target milestones associated with the 2018 milestone are currently at risk. Ecology stated that the SST integrity program is an important aspect for protecting health and safety, and its goal is to ensure the program remains intact.

Ecology noted that the first three milestones on the TPA monthly summary were completed last quarter and asked if they needed to be carried forward. It was agreed that the milestones could be removed from the TPA summary report, and if there were any follow-on comments or actions, they would be tracked via ORP's key document list.

### **In Tank Characterization and Summary**

ORP stated there were no issues or changes to report. Ecology asked about an estimated sampling date for AY-102, noting that the double-shell tank is not reported on in this summary. ORP responded that a smear sample was taken with some results received, but it was determined that a thicker sample was needed. A path forward for taking the samples is being developed. ORP noted that actions No. 8 and No. 9 were added to the agreements, issues and actions list to brief Ecology on tracking sampling.



## **Tank Operations Contract (TOC) Overview**

ORP noted that the report provided today is for the TOC performance through the end of June 2012. ORP provided a recent update that as of August 6, 2012, WRPS reached 4.671 million hours without a lost time workday injury. ORP stated that the TOC cost performance index (CPI) has been holding fairly well since last October. There have been some ups and downs with the schedule performance index (SPI) that are associated with retrieval activities.

For the area of retrieval and closure, the unfavorable schedule variance was due in part to a delay in receipt of the ERSSs for C-101 and C-102. The ERSSs were received in July 2012. ORP stated that the positive cost variance for waste feed delivery is overstated due to the fact that some work is performed by Savannah River National Labs (SRNL). The costs are incurred on an inter-entity work order (IEWO), which creates a false positive variance that was reported for May and June and will be reported for July 2012. The project controls manager for the one-system is reviewing the process with offsite laboratories in an effort to gain a true picture for the earned value management system (EVMS) data.

## **Acquisition of New Facilities; M-90-00, M-47-00**

ORP reported that the conceptual design 1 (CD-1) packages for the Interim Hanford Storage and Secondary Liquid Waste Treatment projects were submitted by the contractor. ORP has suspended both projects for the balance of FY13. ORP noted that milestone M-047-06 was missed, as reported earlier today, and Ecology has been notified that M-090-11 is to be missed.

## **Supplemental Treatment/Part B Permit Applications; M-62-00, -20, -30, -45**

M-062-40ZZ - ORP reported that a team has been established by the contractor that will deliver the one-time supplemental treatment technologies report. Contractor-level workshops have been held to discuss what further technology development is necessary to supply the information for the one-time report. ORP noted that there already is information on bulk vitrification and the vitrification technology for low activity waste (LAW) that the Waste Treatment Plant (WTP) will be using, and the status of those technologies will be updated in the one-time report. ORP added that testing on the fluidized bed steam reforming that was started a couple years ago is wrapping up, and that information will be included in the one-time report. ORP stated that there will be technology development activities taking place on the waste form qualification for a Cast Stone waste form as well as technetium removal, which could apply to any of the four technologies because all of the technologies have different challenges regarding technetium. ORP added that if there are opportunities to remove technetium from the feed streams to either melters or Cast Stone, there may be a better waste form to ultimately go through disposal. Ecology clarified that the four technologies that ORP is considering are vitrification, Cast Stone, steam reforming and bulk vitrification. ORP concurred, noting that technetium removal is not a technology by itself, but a fifth option being considered that could apply to the four technologies.

ORP provided dates for the two-year process to develop the one-time technologies report as follows: 1) schedule a meeting with Ecology in September 2012 to provide an overview of the

two-year process and provide Ecology a more detailed schedule; 2) waste form qualification test plan available in September 2012; 3) prepare waste form samples by January 2013; 4) testing with simulants and real Hanford waste in August 2013 to January 2014 time frame.

ORP stated that the information from the waste form qualification work and other data packages will factor into what ORP is calling a risk assessment. ORP added that a method will be needed to evaluate the comparative performance of the waste forms, and the risk assessment will be used. ORP noted that there is no current performance assessment (PA) for the Integrated Disposal Facility (IDF), and since the PA effort would take roughly five years, a completed PA will not be available in time to use as the parties go through the one-time report process. ORP stated that it will also be utilizing the results of the environmental impact statement (EIS) so that the testing and paperwork that is produced will not directly conflict with the EIS.

ORP stated that a final technology data package will be ready by July 2014 to meet the one-time report due date of October 2014. Ecology inquired about any bulk vit research. ORP responded that there is no ongoing testing with bulk vit, but the extensive testing that was done in the past will be reviewed to determine if any new information needs to be factored in for the purpose of the data package. Ecology asked if the same QA/QC process that was used for the EIS will be used for the data package. ORP indicated that the team is still being assembled, and a fuller project team is needed before those decisions can be made.

ORP stated that the intent is to have Ecology involvement throughout the two-year effort, and the Hanford Advisory Board (HAB) will also be brought in as a participant. ORP noted that the one-time report will not have a recommendation, but will be a compilation of all the data. Following issuance of the one-time report, there will be a six-month negotiation period with Ecology to choose the supplemental treatment technology.

#### **M-62-40, System Plan**

ORP reported that the five proposed draft scenarios that were submitted to WRPS for System Plan 6A are no longer being considered as scenarios. Ecology asked if there will still be a system Plan 6A. ORP responded that there have been no further discussions, and a decision has not been put forward regarding whether or not there will be a System Plan 6A.

#### **WTP Overall TPA and CD Summary and Milestone Status; M-62-01; M-62-49; D-00A-01, -06, -17**

ORP reported that the overall major focus for WTP is the contractor's rebaselining activities for LBL -- Low Activity Waste (LAW), Balance of Facilities (BOF) and Analytical Laboratory (LAB). Rebaselining for Pretreatment (PT) and High Level Waste (HLW) is on hold while the technical issues are being resolved. Additional guidance for PT and HLW is being worked internally, and the goal is to issue the guidance in the near future. ORP noted that the status of the WTP CD milestones is unchanged since last quarter's report, and the three milestones are flagged with the same issue relative to the technical resolutions for PT and HLW.

ORP reported that the employment work force is stabilized, and the FTEs are fairly close to what was reported last quarter, which represents about a 1,000 FTE reduction about 12 months ago. The craft work has held stable for the last six months. Changes in personnel since then have been the nonmanual, and it is anticipated that that will remain stable.

Significant Past Accomplishments - ORP reported that RLD vessel 8 (RLD-8) is onsite, but it is still in the possession of the vendor due to welding issues. The welds are repairable and will be redone under the vendor's control and cost.

Significant Planned Actions in the Next Six Months - The final reports for the process vessel vent (PVV) system will be issued. The sample analysis that was dried out and failed during the large scale testing has been redone, and the revised report is anticipated this month.

#### **WTP Pretreatment (PT) Facility; D-00A-13, -14, -15, -16, -19**

ORP reported that there is minimal activity in the field other than maintenance. All of the activities are associated with engineering, technical issue resolution, and the PVV testing. ORP noted that as a result of the extent of condition review on RLD-8 in HLW, the weld issues are being pursued in all of the facilities. ORP stated that an independently chartered review team has been established by the Secretary of Energy, and ORP has been interacting with the team via webinars. ORP noted that the focus of the team is directed by the Secretary, and the current focus is the black cells. The team is planning to be onsite in early September 2012. Yakama Nation (YN) asked if there will be an opportunity for the public to communicate with the team. ORP responded that it was not aware of any opportunity, and all of the team's actions are coordinated by the Secretary. The team has submitted subjects to ORP, and ORP is providing supporting information. ORP stated that the corrosion/erosion action plan has been revised. Ecology indicated it had not seen the revised plan. ORP will provide Ecology the plan.

Significant Planned Actions in the Next Six Months - ORP stated that revision to the Defense Nuclear Facilities Safety Board (DNFSB) 2010-2 recommendations associated with the large scale testing will be submitted to the board. The original assumption that Newtonian would bound the non-Newtonian scenarios is not valid, so the path forward for testing the non-Newtonian vessels will be updated in the plan for large scale testing. In response to a question posed by Ecology regarding the potential impact to schedule caused by the revision, ORP stated that initial reviews indicate the schedule is moving out. ORP is considering options for bringing the schedule back into the same time period. Ecology asked if the logic has already been reoriented. ORP responded that logic reorientation has been done, and the process for incorporating it into the schedule is under way.

#### **WTP High-Level Waste (HLW) Facility; D-00A-02, -03, -04, -21**

ORP reported that the main focus continues to be maintaining the schedule to complete the December 2012 milestone for the 37-foot structural steel. ORP indicated that completion of the milestone is well ahead of schedule. There are four beams left to be placed, and they are being kept out to provide efficiencies in bringing material in over the top. The beams can be placed in

a short amount of time. Ecology asked why the status of the 37-foot milestone is ongoing rather than on schedule. ORP responded that the milestone is on schedule, and the terminology is dictated by the lawyers. ORP noted that the remaining milestones are flagged due to the ongoing technical issues. ORP reported that the head of RLD-7 was manufactured by one vendor and then removed to another vendor for completion due to weld issues. A team has been assembled, as a result of findings through a level 1 process, to conduct a review of equipment in place for quality and welding as well as the current configuration of designs.

#### **WTP Low-Activity Waste (LAW) Facility; D-00A-07, -08, -09**

ORP noted that the technical issues are not impacting LAW to the extent of PT and HLW. ORP added that the milestones for LAW are on schedule. YN asked about the capacity of 30 metric tons per day of vitrified glass. ORP responded that 30 metric tons is the design capacity of the melters, and there are two melters in the LAW facility rated at 15 metric tons each of glass per day. YN noted the current discussions regarding PT's schedule and bypassing PT and the potential for direct feed to LAW from tank farms. ORP responded that from tank farms' perspective, no decision has been made and no money has been spent on the option of direct feed. ORP added that the contractor has been directed to take no action that precludes direct feed, and the option is being maintained. YN asked if a briefing on direct feed could be provided to the HAB. ORP responded that a briefing was provided six months ago, and could be provided again. ORP added that there has been no change since the briefing was provided, except there is less of a drive from Headquarters towards direct feed.

ORP noted that if the decision is made for direct feed, the minor modifications to valving, etc., to allow direct feed is in the scope of the LAW facility and could be supported. YN asked what would be used to remove technetium at the tank farms since LAW does not have that capability. ORP responded that the technetium that goes into LAW now either goes into glass or comes back as a secondary waste stream to tank farms, which is consistent with the current planning with the exception of going through a recycle loop in the WTP side in PT. ORP added that the direct feed scenario would have to go through the regulatory pathways and approvals and permitting actions long before direct feed is executed, and none of those actions have been worked with tank farms.

#### **WTP Analytical Laboratory (LAB); D-00A-05**

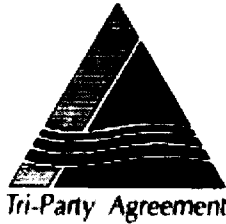
The LAB is finishing up construction substantially complete to meet the December 2012 milestone. ORP noted that the analytical equipment won't be installed at that point, and the milestone completion is the physical construction of the facilities. ORP reported that as a result of the issue with the valve internals potentially being impacted by excessive temperature during welding, inspections are ongoing. Replacement kits for all of the valves have been procured in an effort to preclude potential issues where the valves are located during startup. ORP stated that the valve issue has created a slight challenge in keeping up with the physical work in LAB by the end of December 2012, but it is expected that the CD milestone will be met.

Ecology stated that a meeting is scheduled with ORP next Monday (8/20/12) to finalize discussions regarding the path forward for the 2012 milestone completion packages for HLW,

LAW and BOF. The expectation is that the contractor will submit the package to ORP by December 1, 2012, and ORP will submit the package to Ecology by December 15, 2012. Ecology indicated there are no issues to preclude accomplishing the milestones.

**WTP Balance of Facilities (BOF); D-00A-12**

ORP stated that BOF is moving forward on schedule. ORP noted that there have been discussions with Ecology in terms of the permitting process for equipment in BOF and LAW.



**Agenda**  
**August 16, 2012**  
**Office of River Protection Quarterly Milestone Review Meeting**  
 Ecology Offices, Conference Room 3A/B  
**Chairperson: Jane Hedges**

<b>Topic</b>	<b>Leads</b>	<b>Time</b>
Statistics / Status	James Lynch / Dan McDonald / Jeff Lyon	8:30
Single-Shell Tank Corrective Action; M-45, -50, -60	Chris Kemp / Jeff Lyon	8:35
Single-Shell Retrieval and Closure Program TPA Milestones Status; M-45-00 series, - Tank in Appendix H Status - C-Farm Critical Path - Tanks with Individual Milestones - Double-Shell Tank Closure - 242-A Evaporator Status SST Retrieval and Closure CD Milestones and TWRWP Status; D-00B series	Chris Kemp / Kathy Higgins / Jeff Lyon	8:40
SST Integrity Assurance; M-45-91	Jeremy Johnson / Michelle Hendrickson	8:55
In Tank Characterization and Summary	Jeremy Johnson / Michael Barnes	9:00
Tank Operations Contract (TOC) Overview	Janet Diediker / Jeff Lyon	9:05
Acquisition of New Facilities; M-90-00; M-47-00	Janet Diediker / Jeff Lyon / Dan McDonald	9:15
Supplemental Treatment and Part B Permit Applications; M-62-00, -20, -30, -45	Steve Pfaff / Jeff Lyon / Dan McDonald	9:20
System Plan; M-62-40	Dabrisha Smith / Jeff Lyon / Dan McDonald	9:25
WTP Overall TPA and CD Summary and Milestones Status; M-62-01; M-62-49; D-00A-01, -06, -17	Delmar Noyes / Dan McDonald	9:30
WTP Pretreatment (PT) Facility; D-00A-13, -14, -15, -16, -19	Delmar Noyes / Dan McDonald	9:50
WTP High-Level Waste (HLW) Facility; D-00A-02, -03, -04, -21	Delmar Noyes / Dan McDonald	9:55
WTP Low-Activity Waste (LAW) Facility; D-00A-07, -08, -09	Delmar Noyes / Dan McDonald	10:00
WTP Analytical Laboratory (LAB); D-00A-05		10:05
WTP Balance of Facilities (BOF); D-00A-12		10:10

*Tri-Party Agreement Office of River Protection Milestone Review  
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<u>Name</u>	<u>Organization</u>
Terry Noland	MSA
Kathy Knox	Knox Court Reporting
JD Dowell	RL (D&E)
Jane Hedges	Ecology
Jeremy Johnson	ORP
JD HF Lyer	Ecology
Shirley Cimar	ORP
Chris Kay	ORP
Cheryl Whalen	Ecology
Jan McDaniel	Ecology
John Price	Ecology
Steve Pfaff	ORP
Janet Diediker	ORP
Kathy Higgins	ORP
Chris Harrington	ORP
JAMES LYNCH	ORP
Rod Lobos	EPA
Dean Warren	YR E&R
Tan Brown	DOE ORP

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<u>Name</u>	<u>Organization</u>
ROB BURR	MSA
JARED MATHEY	Ecology
Mike Barnes	Ecology
Steve Killoy	WRPS
Jeff. <del>Kyle</del> Luke	WRPS
Nancy Uziemido	Ecology
Joe Caggiano	Ecology
Felix Miera	WRPS
Reed Kaldor	MSA
MICHAEL PICOQUIN	<del>WRPS</del> WRPS
DeBriha Smith	ORP
Ellen Mattlin	ORP
Delmar Noyes	DOE
KATE WOODY	DOE
Sydney Nachbaur	DOE



FINAL

Office of River Protection  
Tri-Party Agreement  
Monthly Summary Report  
August 2012



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August 2012

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7	C-Farm Critical Path	Kathy Higgins / Jeff Lyon
10	242-A Evaporator Status	Ron Koll / Jeff Lyon
11	SST Integrity Assurance; M-45-91	Jeremy Johnson/ Michelle Hendrickson
13	In Tank Characterization and Summary	Jeremy Johnson / Michael Barnes
15	Tank Operations Contract (TOC) Overview	Janet Diediker / Jeff Lyon
21	Acquisition of New Facilities; M-90-00; M-47-00	Janet Diediker / Jeff Lyon / Dan McDonald
22	Supplemental Treatment and Part B Permit Applications; M-62-00, -20, -30, -45	Steve Pfaff / Jeff Lyon / Dan McDonald
23	System Plan; M-62-40	Dabrisha Smith / Jeff Lyon / Dan McDonald
24	WTP Overall TPA Summary and Milestone Status; M-62-01	Delmar Noyes / Dan McDonald

Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2012</b>				
M-062-40B	Submit System Plan	10/31/2011	10/21/2011	Completed
M-062-49	Sub. Report to ECY Demonstrating WTP Design Meets Vit. Criteria	10/31/2011	10/27/2011	Completed
M-045-91B	DOE Submit a Sampling and Analysis Plan to Ecology	12/30/2011	9/20/2011	Completed
M-045-92F	Meet Yearly on Performance of Barrier	12/31/2011	11/30/2011	Completed
M-045-91G-T02	Provide AOR Final Doc. for SSTs on 750,000 Gallon Tanks	1/31/2012	11/18/2011	Completed
M-062-01X	Submit Semi-Annual Project Compliance Report	1/31/2012	1/27/2012	Completed
M-045-91D	Submit Analytical Test Plan for Cores Removed from C-107 Plug	3/31/2012	6/27/2011	Completed
M-045-91G-T06	Provide Report of the Visual Inspection of 12 SSTs M-045-91G-T05	3/31/2012	03/12/2012	Completed
M-045-92M	Barrier 2 Design/Monitoring Submittal to Ecology	6/30/2012	5/19/2011	Completed
M-047-06	Comp. Neg's of No More Than 2 Interim Milestones	6/30/2012	Missed	Missed
M-062-01Y	Submit Semi-Annual Project Compliance Report	7/31/2012	7/27/2012	Completed
M-045-56H	Meet Yearly to Discuss Interim Measures	7/31/2012	6/21/2012	Completed
<b>Fiscal Year 2013</b>				
M-045-20	Submit Interim Measures Investigation Work Plan and TPA Chg Pckgs for M-045-22 Target Dates	12/31/2012		On Schedule
M-090-11	Comp. Neg's No More Than 2 Canister Storage Fac. Const. Int. M/S	12/31/2012		To Be Missed
M-062-01Z	Submit Semi-Annual Project Compliance Report	1/31/2013		On Schedule
M-045-91F-T01	Provide Report of the Liquid Leak Rate Assessments	1/31/2013		At Risk
M-045-21	Submit Sampling and Analysis Plan for 241-TX Tank Farm	3/31/2013		On Schedule
M-045-91D-T01	Provide Report on the Concrete Dome Samples from Tank C-107 Plug	5/31/2013		On Schedule
M-045-91F-T03	Provide Report on Testing for Ionic Conductivity of SSTs	5/31/2013	05/02/2012	Completed
M-045-91F-T02	Provide Report of Liner Failures for SSTs	7/31/2013		At Risk
M-045-91F-T04	Provide Report on 100-Series SSTs as having Leaked in RPP-32681	7/31/2013		At Risk
M-045-91E	Provide SST Farms Dome Deflection Surveys Every Two Years	9/30/2013		On Schedule
M-045-91G-T03	Provide AOR Final Doc. for SSTs on 1,000,000 Gallon Tanks	9/30/2013		At Risk



## **WBS 5.2 Retrieve and Close Single Shell Tanks**

**M-045-20, Submit Interim Measure Investigation Work Plan to Ecology**, Due: 12/31/12, Status: On Schedule. ORP will submit to Ecology for review and approval an interim measures investigation work plan for to vadose zone characterization at 241-TX Farm and 241-U Farm, and soil desiccation/contaminant removal proof-of-principal test at 241-SX Farm. The work plan will also be submitted with a TPA Change Package to establish milestone due date for M-045-22 and target dates for submittal of three secondary documents, see M-045-22-T01, -T02, and -T03. Added per TPA change package M-45-12-04.

**M-045-21, Submit for Review and Approval a Sampling and Analysis Plan to Ecology for Soil Samples for 241-TX Tank Farm Investigation**, Due: 03/31/2013, Status: On Schedule. Further description of this SAP will be provided in the Work Plan submitted under M-045-20. Added per TPA change package M-45-12-04.

**M-045-22-T01, Submit Results of Vadose Zone Characterization of 241-TX to Ecology**, Due: TBD based on M-045-20 TPA Change Package Submittal, Status: On Schedule. Added per TPA change package M-45-12-04.

**M-045-22-T02, Submit Results of Vadose Zone Characterization of 241-U to Ecology**, Due: TBD based on M-045-20 TPA Change Package Submittal, Status: On Schedule. Added per TPA change package M-45-12-04.

**M-045-22-T03, Submit SX Soil Desiccation/Contaminate Removal Tech Results to Ecology**, Due: TBD based on M-045-20 TPA Change Package Submittal, Status: On Schedule. Added per TPA change package M-45-12-04.

**M-045-22, Review M-045-22-T03 Report and Determine Path Forward**, Due: TBD based on M-045-20 TPA Change Package Submittal, Status: On Schedule. This ORP/Ecology decision point will determine whether to continue with soil desiccation/contaminant removal testing and other interim measures, and if remaining work in Milestone M-045-92 should be modified. Added per TPA change package M-45-12-04.

**M-045-56H, Complete Implementation of Agreed to Interim Measures (Meet Yearly to Discuss Interim Measures)**, Due: 07/31/2012, Status: Completed 06/21/2012. The annual M-045-56 meeting was held June 21, 2012. Meeting minutes have been signed and are being placed into the TPA Administrative Record.

**M-045-58, Submit to Ecology for Review and Approval as an Agreement primary document, a phase 2 CMS Master Work Plan**, Due: 12/31/2008 Status: Complete. The outstanding issues involved integration of RCRA and CERCLA requirements, and the definition of a schedule for future RFI/CMS Work Plan development and implementation. With the development of the RCRA/CERCLA Integration White Paper (under M-045-80), it is now understood that the path to soil corrective measures implementation involves a modification to the RCRA Permit for SST Closure, and a ROD to address the CERCLA requirements. In addition, modifications to milestone M-045-84 and M-045-85 have now been made to explicitly define the requirements for schedule development for future RFI/CMS Work Plans, RFI/CMSs



and Corrective Measures Implementation Plans. Thus all outstanding issues for the M-045-58 deliverable have been addressed, and this milestone may be considered closed. Ecology is preparing a letter on this milestone. After this deliverable is closed via Ecology's letter, future updates will be tracked on the ORP Key Documents List.

**M-045-59, Control surface water infiltration pathways as needed to control or significantly reduce the likelihood of migration of subsurface contamination to groundwater at the SST WMAS (pending the CMS report, milestone M-45-58, and implementation of other interim corrective measures), Due: TBD, Status: On Schedule**

**M-045-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RFI/CMS Report for WMA C, Due: 12/31/2014, Status: On Schedule**

**M-045-62, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 Corrective Measures Study Report for WMA C, Due: 06/30/2015, Status: On Schedule**

**M-045-92, DOE and Ecology will establish selection criteria for installation of additional interim barriers at additional WMAs (beyond the T-106 and TY barriers), Due: 09/30/2017, Status: On Schedule.** This milestone date has been modified according to M-45-12-04 and the decision to move forward with construction/design of additional barriers dependent on discussions per M-045-22.

**M-045-92N, Construct Barriers 1 and 2 in 241-SX Farm Due: 10/31/15, Status: On Schedule.** The decision to move forward with construction/design of additional barriers is dependent on discussions per M-045-22.

**M-045-92O, Submit a Final Design and Monitoring Plan for Interim Barrier 3 Due: 06/30/15, Status: On Schedule.** The decision to move forward with construction/design of additional barriers is dependent on discussions per M-045-22.

**Significant Past Accomplishments:**

- Automated data collection system for T-Farm interim barrier monitoring continues gathering data.
- Automated data collection system for TY Interim Barrier monitoring continues gathering data.
- Developed an outline of the Work Plan for interim measures for M-045-20.

**Significant Planned Actions in the Next Six Months:**

- Perform planning for Fiscal Year 2013 Interim Measures activities.
- Publish results of evaluation of barrier monitoring data, and recommend changes to future monitoring plan for TY barrier.
- Perform verification and validation of the laboratory analysis of direct push soil samples previously obtained in C farm.
- Provide the Work Plan for interim measures for M-045-20.
- Initiate field work under the M-045-20 work plan.



**Issues:**

Initial planning for FY2013 shows that continued constraints may affect out-year milestones, including M-45-61, Submit to Ecology for review and approval as an Agreement primary document a Phase 2 RFI/CMS Report for WMA C, Due: 12/31/2014.

## **SST Retrieval and Closure Program**

**M-045-101, Submit to Ecology as a primary document a report on all catch tanks and associated pipelines in the SST System Part A, Due: 12/27/2010, Status: Complete.** Document transmitted from ORP to Ecology via letter 10-TPD-176 on 12/28/2010. Comments were transmitted from Ecology to ORP on May 27, 2011, via letter 11-NWP-048. ORP requested one extension to the comment resolution period to December 5, 2011. Resolutions have been identified for all comments and the RCRs and redline provided to Ecology on 11/14/2011 with an extension date for Ecology response of March 15, 2012. Ecology and ORP met in May, June, and July identified a path to resolve remaining comments. The due date has been extended to August 31 to incorporate final changes.

**M-045-80, Complete those portions of C-200 Closure Demonstration Plan, Due: 1/31/2011 Status: Complete.** Four primary documents transmitted from ORP to Ecology via letter 10-TPD-166 on 12/28/10. Comments on three of the four documents were transmitted from Ecology to ORP on May 27, 2011, via letters 11-NWP-045, 11-NWP-047, and 11-NWP-051. ORP requested an extension, to December 5, 2011. Ecology requested additional time to review *Radioactive Waste Determination Process Plan for Waste Management Area C Tank Waste Residual* via 11-NWP-049. ORP transmitted responses on the C-301 Catch Tank Retrieval Feasibility Study (RPP-RPT-45723) to Ecology on November 8, 2011, via 11-TDP-085. ORP transmitted responses on the 241-C Tank Removal Study (RPP-RPT-47167) on November 9, 2011, via 11-TPD-084. ORP received Ecology comments on the *Radioactive Waste Determination Process Plan for Waste Management Area C Tank Waste Residuals* on December 7, 2011 and is evaluating comments. ORP transmitted responses for *The Waste Management Area C RCRA/CERCLA Integration White Paper* (RPP-PLAN-46459) on January 17, 2012 via 11-TF-151. ORP provided updated Draft WIR process paper with RCRs to Ecology on March 15<sup>th</sup>. Ecology and ORP agreed to meet to discuss comment resolution and extend the final resolution to the end of May. Ecology's comments were incorporated and Ecology has concurred with the changes. The final document was released to the TPA Admin Record on 07/18/2012. Future updates to any of these documents will be tracked on the ORP Key Documents List.

**M-045-81, Implement & complete all remaining activities in C-200 Closure Demonstration Plan, with any revisions agreed to by Ecology and DOE, and provide a report of the results of those activities, Due: 9/30/2014, Status: Complete.** The original C-200 Closure Demonstration Plan was revised and released as *Waste Management Area C Closure Demonstration Project Plan* (RPP-PLAN-46484, Revision 3). Ecology and DOE agreed to the changes in this revision of the plan in December 2011 Project Managers Meeting. The remaining deliverable specified in the closure demonstration plan was formally transmitted from ORP to ECY via letter 10-TPD-166 on 12/28/2010. Comments were transmitted from Ecology to ORP on June 1, 2011, via letter 11-NWP-052. ORP requested an extension, to December 5, 2011. Ecology and ORP met on 11/1, 11/14, and 11/17/2011 to resolve comments. ORP requested an extension to March 15, 2012 to incorporate comment resolutions. ORP provided updated Draft



Pipeline Feasibility Report and RCRs to Ecology on March 15<sup>th</sup>. Ecology and ORP met in May and June to resolve comments. All comments were resolved and the final document has been released as of 07/02/2012. Future updates to any of these documents will be tracked on the ORP Key Documents List.

**M-045-82, Submit complete permit mod requests for Tiers 1, 2, & 3 of the SST, Due:**  
9/30/2015 Status: On Schedule

**M-045-84, Complete negotiations of TPA interim MS for closure of second WMA, Due:**  
1/31/2017, Status: On Schedule

**M-045-83, Complete the closure of WMA C, Due:** 6/30/2019, Status: On Schedule

**M-045-85, Complete negotiations of TPA interim MS for closure of remaining WMAs, Due:**  
1/31/2022, Status: On Schedule

**M-045-70, Complete waste retrieval from all remaining SSTs, Due:** 12/31/2040, Status: On Schedule

**M-045-00, Complete Closure of all Single Shell Tank Farms, Due:** 1/31/2043, Status: On Schedule

**M-045-86, Submit retrieval data report to Ecology for 19 tanks retrieved, Due:** TBD (12 months after retrieval certification), Status: On Schedule

**Significant Past Accomplishments:**

- See discussions above and related discussions in Consent Decree report.

**Significant Planned Activities in the Next Six Months:**

- See discussions above and related discussions in Consent Decree report.
- Work to discuss and resolve issues and comments associated with deliverables for M-45-101.

**Issues:**

USDOE is deferring the final numeric modeling supporting the WMA C performance assessment to 2013 due to budget constraints in 2012. Impacts of this delay are being incorporated into the critical path schedules. Initial budget guidance for FY2013 will not support continuing the WMA C-PA in 2013. Impacts on individual milestones will be evaluated and presented through the TPA Paragraphs 148/149 process. ORP intends to meet and discuss the path forward with Ecology.

## **Tank in Appendix H. Status - Single Shell Waste Retrieval Criteria**

### **Tank 241-C-106**

**Significant Past Accomplishments:**

None

**Significant Planned Activities in the Next Six Months:**

Continue U.S. Nuclear Regulatory Commission (NRC) review of the C-106 exception request. A Request for Additional Information (RAI) was received from the NRC in February 2009.

**Issues:**

It has been discussed with the NRC that much of the additional information requested is dependent upon development of C-Farm residual waste PA and, therefore, cannot be provided until the PA is published.

**Tank Retrievals with Individual Milestones****Tank 241-A-103**

**M-045-15, Completion of Tank A-103 SST Waste Retrieval**, Due: 9/30/22 Status: On schedule. Change package M-45-11-04 replaced tank S-102 with tank A-103 and changed to milestone completion date for M-045-15 to 09/30/2022.

**M-045-15A, Embedded Milestone, Submit a Retrieval Data Report Pursuant to Agreement Appendix I**, Due: 9/30/22, Status: On schedule. Updated with tank A-103 and due date of 9/30/22 per M-45-11-04 Change Package.

**M-045-15D, Embedded Milestone, if appropriate, DOE will request an exception to waste retrieval criteria pursuant to Agreement Appendix H**, Due: 9/30/22, Status: On Schedule. Updated with A-103 tank and due date of 9/30/22 per M-45-11-04 Change Package.

**Significant Past Accomplishments:**

- Change Package M-45-11-04 was signed by ORP and Ecology on 04/19/11.

**Significant Planned Activities in the Next Six Months:**

None

**Issues:**

None

**Tank 241-S-112**

**M-045-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**, Due: TBD (in accordance with M-045-84 or M-045-85), Status: On Schedule

**M-045-13E, Complete Negotiations for Interim Milestones for Closure of S-112**, Due: TBD Status: On Schedule as part of M-045-84 or M-045-85.

**Significant Past Accomplishments:**

Ecology letter of January 7, 2008, concurred with ORP that retrieval of Tank S-112 is complete.

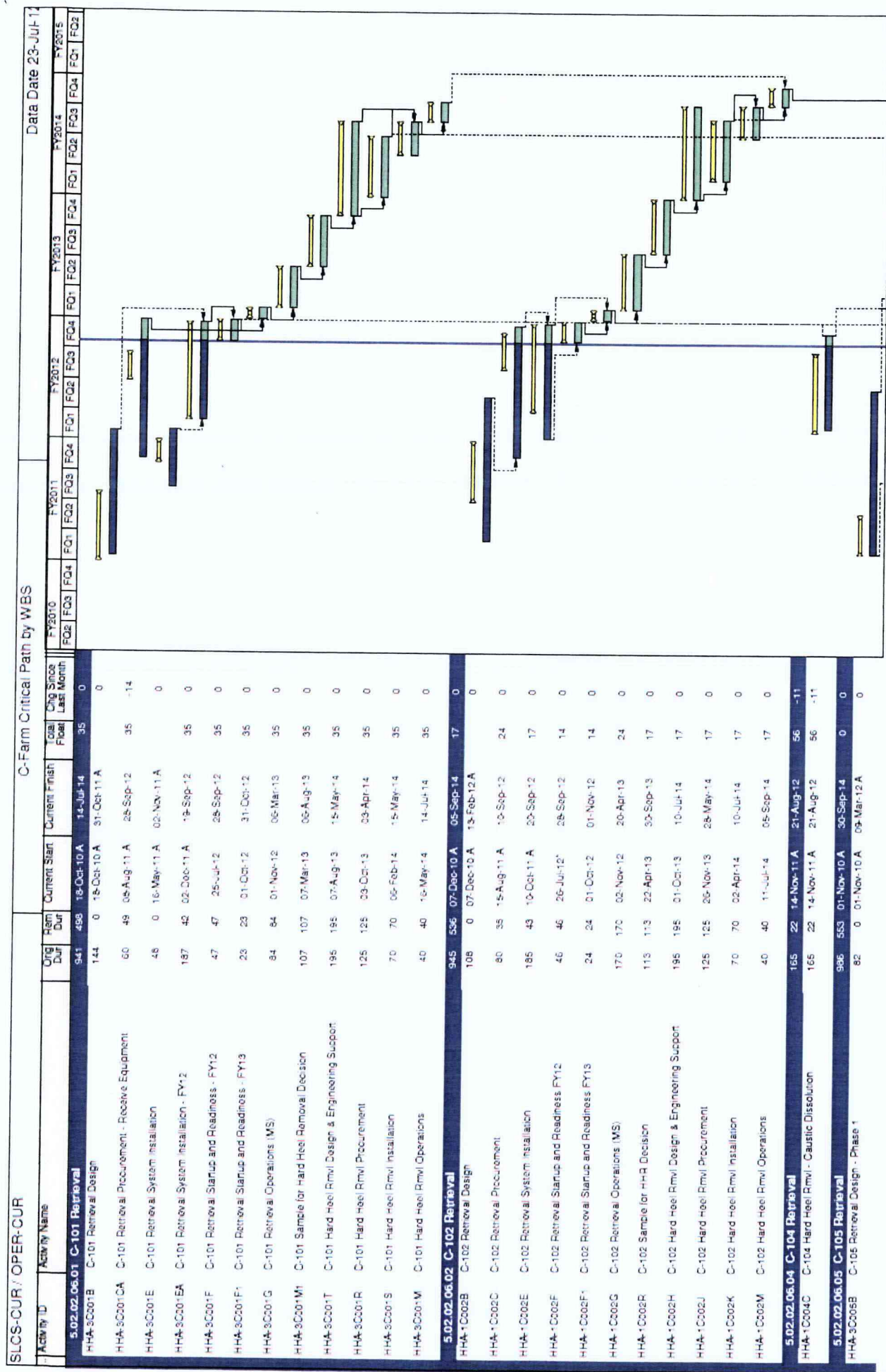
**Significant Planned Activities in the Next Six Months:**

None

**Issues:**

None





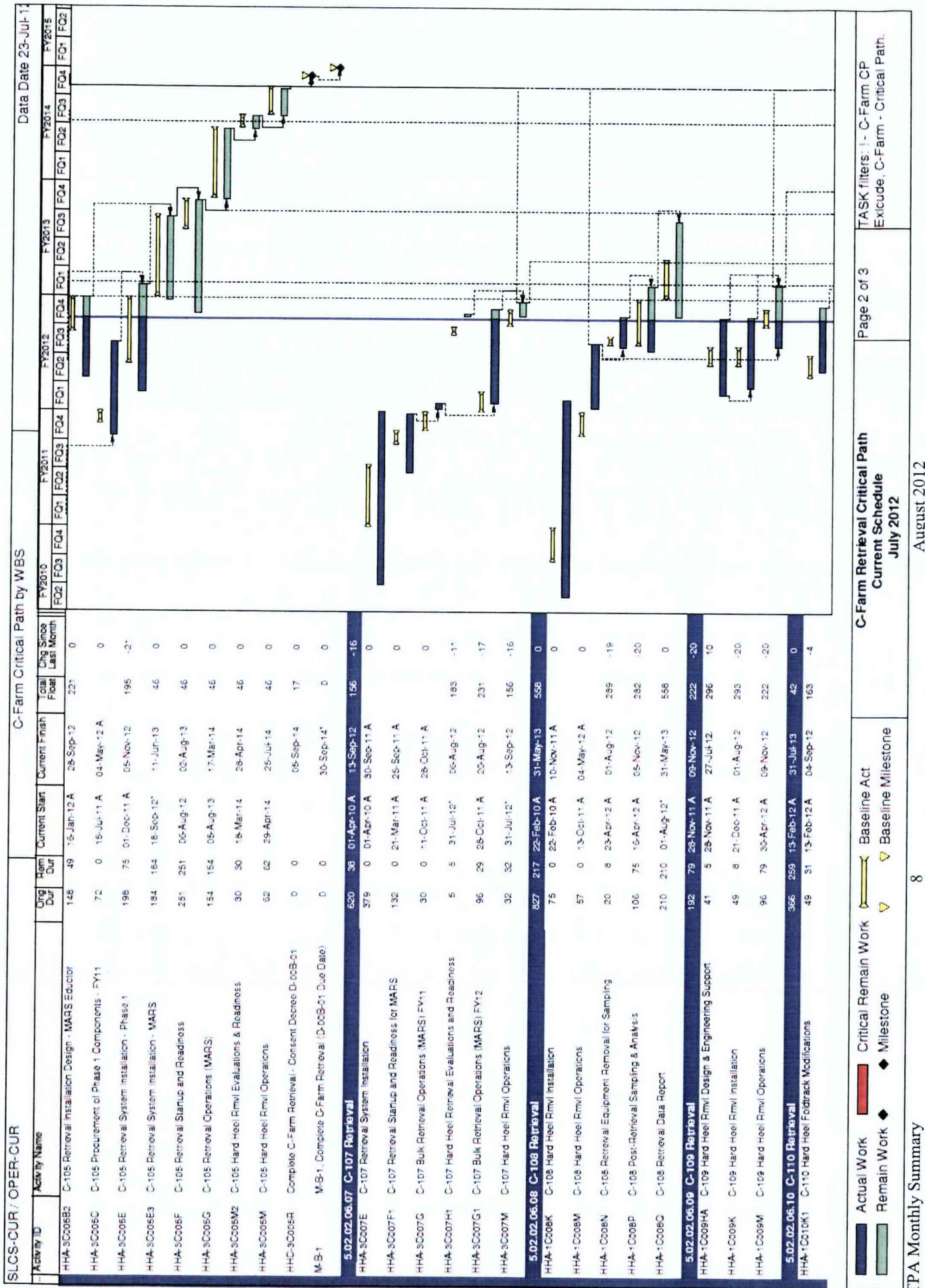
Actual Work Critical Remain Work Baseline Act

Remain Work Milestone

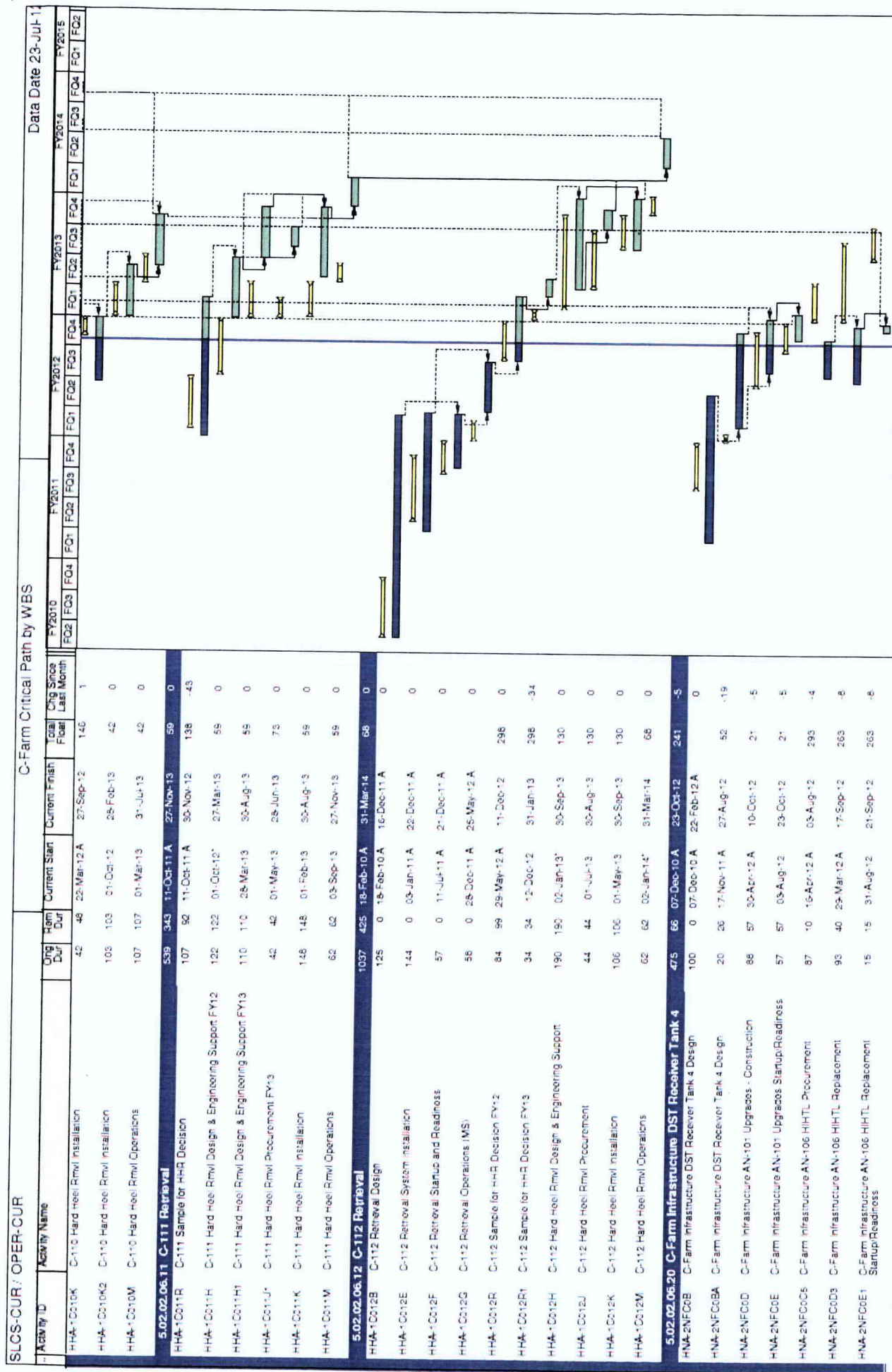
C-Farm Retrieval Critical Path  
Current Schedule  
July 2012

Page 1 of 3

TASK filters: 1- C-Farm CP  
Exclude, C-Farm - Critical Path.







Actual Work Critical Remain Work Baseline Act

Remain Work Milestone

C-Farm Retrieval Critical Path  
Current Schedule  
July 2012

TASK filters: | - C-Farm CP  
Exclude, C-Farm - Critical Path.

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## 242-A Evaporator Status (previously reported under Milestone M-48, which has been closed out)

### 242-A Campaign strategy:

No campaigns were conducted in FY2011 due to ongoing 242-A and Tank Farm Life Extension and ARRA funded facility upgrades. The 242-A Campaign Strategy for FY2010 through FY2015 depicted below has been updated based on ORP-11242, River Protection Project Plan, Revision 6, and ongoing schedule integration efforts.

Fiscal Year	Campaign No.	Feed Source	Slurry Tank	Comments
FY10	10-01	AW-106	AW-106	Campaigns 10-01/10-02 were performed back-to back starting in late August and completing in early October 2010. Campaign 10-02 was an acceleration of previously planned Campaign 11-01.
FY10	10-02	AW-106	AW-106	
FY11	NA	NA	NA	No campaign conducted in FY11 due to ongoing 242-A and Tank Farm facility life extension and ARRA funded upgrades.
FY12	NA	NA	NA	No campaign conducted in FY12 due to ongoing 242-A and Tank Farm facility upgrades and revision to the 242-A Documented Safety Analysis (DSA).
FY13	13-01	AP- 107	AP-107	Estimated start May 2013. May require two (2) passes to achieve waste volume reduction.
FY13	13-02-	AW-106	AW-106	Estimated start July 2013.
FY14	14-01	AN-106 AZ-102 AW-106	AP-107	Estimated start March 2014. Two (2) passes required.
FY15	15-01	AY-101 AZ-102	AP-107	Estimated start March 2015. Three (3) passes required.
FY15	15-02	AY-101	AP-107	Estimated start August 2015. Four (4) passes required.



## **SST Integrity Assurance**

**M-045-91G-T02, provide to Ecology the Structural Analyses of Record final documentation for SSTs for 750,000 gallon tanks (BY, S, TX and TY Farms), Due: 1/31/2012, Status: Complete 11/18/11. (ORP letter 11-TPD-091)**

**M-045-91D, Submit to Ecology an analytical test plan for the cores removed from the C-107 plug, Due: 3/31/2012, Status: Complete 06/27/11. (ORP letter 11-TPD-043)**

**M-045-91G-T06, Provide to Ecology a report documenting and evaluating the visual inspection of 12 SSTs per the criteria in M-045-91G-T05, Due: 3/31/2012, Status: Complete 03/12/12. (ORP Letter 12-TF-0007)**

**M-045-91F-T01, Provide to Ecology as a HFFACO secondary document a report evaluating the applicability to Hanford SSTs of the liquid leak rate assessments of sludge and salt-cake from the Savannah River Site, Due: 1/31/2013, Status: At risk. TPA change package M-45-12-01, moving M-45-91F-T01 and G-T03 out one year was signed by ORP and Ecology on 01/23/12.**

**M-045-91D-T01, Provide Ecology a report containing the results and interpretation of testing, and analysis performed on the concrete dome samples obtained from the Tank C-107 plug, Due: 5/31/2013, Status: On schedule.**

**M-045-91F-T03, Provide to Ecology, as a HFFACO secondary document a report assessing the feasibility of testing for ionic conductivity between the inside and outside of SSTs, Due: 5/31/2013, Status: Complete 05/02/2012. (ORP letter 12-TF-0009)**

**M-045-91F-T02, Provide to Ecology as a HFFACO secondary document a report evaluating the common factors of liner failures for SSTs that have leaked and will provide recommendations as appropriate, such as enhanced Leak Detection, Monitoring, and Mitigation, Due: 7/31/2013, Status: At risk.**

**M-045-91F-T04, provide to Ecology, as a HFFACO secondary document, a report on the 100-series single-shell tanks which have been or will be identified as having leaked in RPP-32681, Rev 0, Due: 7/31/2013, Status: At risk.**

**M-045-91G-T03, Provide to Ecology the Structural Analyses of Record final documentation for SSTs for 1,000,000 gallon tanks (A, AX and SX Farms), Due: 9/30/2013, Status: At risk. TPA change package M-45-12-01, moving M-45-91F-T01 and G-T03 out one year was signed by ORP and Ecology on 1/23/2012.**

**M-045-91E, Provide to Ecology a compilation of the Single-Shell Tank farms dome deflection surveys every two years, beginning 9/30/2013, Due: 9/30/2013, Status: On schedule.**

**M-045-91G-T04, provide to Ecology the Structural Analyses of Record final documentation for SSTs for 55,000 gallon tanks (B, C, T and U Farms), Due: 10/31/2013, Status: At risk.**

**M-045-91F, Provide to Ecology a report (Summary Conclusions Report on Leak Integrity) summarizing and evaluating the information submitted under M-045-91F-T01 through - T04, Due: 12/31/2013, Status: At risk**

**M-045-91G, Provide a Summary Conclusions Report of Structural Analysis of Record (AOR) for SSTs, Due: 4/30/2014, Status: At risk.**

**M-045-91B-T01, Provide Ecology a report containing the results and interpretation of testing. and analysis, performed on the concrete core obtained from Tank A- 106 or alternate tank, Due: 9/30/2014, Status: On schedule.**

**M-045-91H, Submit a change package (if deemed necessary by DOE and Ecology) to establish additional milestones based on information obtained from the actions in the preceding M-045-91 series milestones to date, Due: 7/31/2015, Status: On schedule.**

**M-045-91I, Provide to Ecology an IQRPE certification of SSTs structural integrity for the remainder of the mission, or for such time as the IQRPE believes he/she can reasonably certify, Due: 9/30/2018, Status: On schedule.**

**Significant Past Accomplishments:**

- Completed target M-045-91F-T03, provide Ecology the Ionic Conductivity Feasibility Report. (ORP letter 12-TF-0009, dated 05/02/12)

**Significant Planned Actions in the Next Six Months:**

- Planning for FY2013.

**Issues:**

- FY2012 funding constraints will impact FY2012 M-045-91 scheduled work. Impacts on individual milestones and/or targets for FY2013 will be evaluated and presented through the TPA Paragraphs 148/149 process. ORP intends to meet and discuss the path forward with Ecology.



## In Tank Characterization and Summary

For the period from July 1 – July 31, 2012:

### Accomplishments:

- Completed RPP-51861, Rev. 1, *C-104 Hard Heel Removal Data Quality Objectives*.
- Completed RPP-RPT-45147, Rev. 1, Derivation of Best-Basis Inventory for Tank 241-C-108 as of April 1, 2012.
- Completed RPP-RPT-43992, Rev. 4, Derivation of Best-Basis Inventory for Tank 241-AN-106 as of April 1, 2012.
- Completed RPP-RPT-44814, Rev. 7, Derivation of Best-Basis Inventory for Tank 241-AN-101 as of April 26, 2012.
- Completed RPP-RPT-52516, Rev. 0, Derivation of Best-Basis Inventory for Tank 241-C-112 as of April 26, 2012.
- Completed RPP-RPT-44049, Rev. 4, Derivation of Best-Basis Inventory for Tank 241-AZ-102 as of April 1, 2012.
- Completed 3 liquid grab sampling events during the hard heel retrieval of C-104. Liquid grab samples were collected on July 12, July 17 and July 25, 2012 during caustic dissolution.
- Completed liquid grab sampling of tank 241-AZ-102 for chemistry control on July 13, 2012. A total of 14 samples and a field blank were collected from various depths.
- Completed the 3rd liquid grab sampling event during the hard heel retrieval of C-109. A liquid grab sample was collected on July 24, 2012 during natrophosphate dissolution prior to pumping the liquid to tank AN-106.

### Planned Action within the next Six Months:

- Tank Sampling
  - Tank SY-102 grab samples for chemistry control – currently scheduled for August 2012.
  - Additional tank C-109 grab samples to support heel retrieval – currently scheduled to re-start in early August/September 2012.
  - Additional tank C-104 grab samples to support heel retrieval in August 2012.
  - Tank AN-106 grab samples for chemistry control after completion of C-107 sluicing – currently scheduled for August/September 2012.
  - Tank C-108 off-riser samples for tank component closure – currently scheduled for August 2012
  - Tank AN-101 grab samples for chemistry control after completion of caustic addition, or C-104 hard heel dissolution – currently scheduled for August 2012.
  - Tank C-112 off-riser samples to evaluate waste characteristics for heel dissolution may occur during June –September 2012 depending on the progress of retrieval. This sampling event may be replaced by in-tank analysis with a Raman probe.
- BBI Updates
  - The tanks identified for updates in FY12 Quarter 4 are still being approved by ORP. The BBI updates will be issued in October 2012.
- Data Quality Objectives (DQO)

- Revision of the PCB Management DQO (RPP-7614) and the Compatibility DQO (HNF-SD-WM-DQO-001) in August/September 2012
- Revision of the Strategic Planning DQO (RPP-44057) in August 2012
- A DQO for Phase 1 Testing of Tanks AN-102 and AN-107 Sr/TRU Precipitation Process is due to be released in September 2012.

**Issues:**

None.



## TANK OPERATIONS CONTRACT (TOC) OVERVIEW

### Project Performance

The earned value performance reporting reflects the format, Work Breakdown Structure (WBS) reporting levels, and variance thresholds as agreed to with the Tank Farms Operations Contractor (TOC) for monthly performance reporting. The earned value analysis is not intended to be a measurement of performance against existing Tri-Party Agreement Milestones.

As of June 30, 2012 the TOC team worked 4,309,008 hours (446 days) without a Lost Time Workday Injury or DART case and achieved 661,002 hours (69 days) since the last Recordable case. There were no Days Away, Restricted, or Transferred (DART) cases or Recordable cases in June.

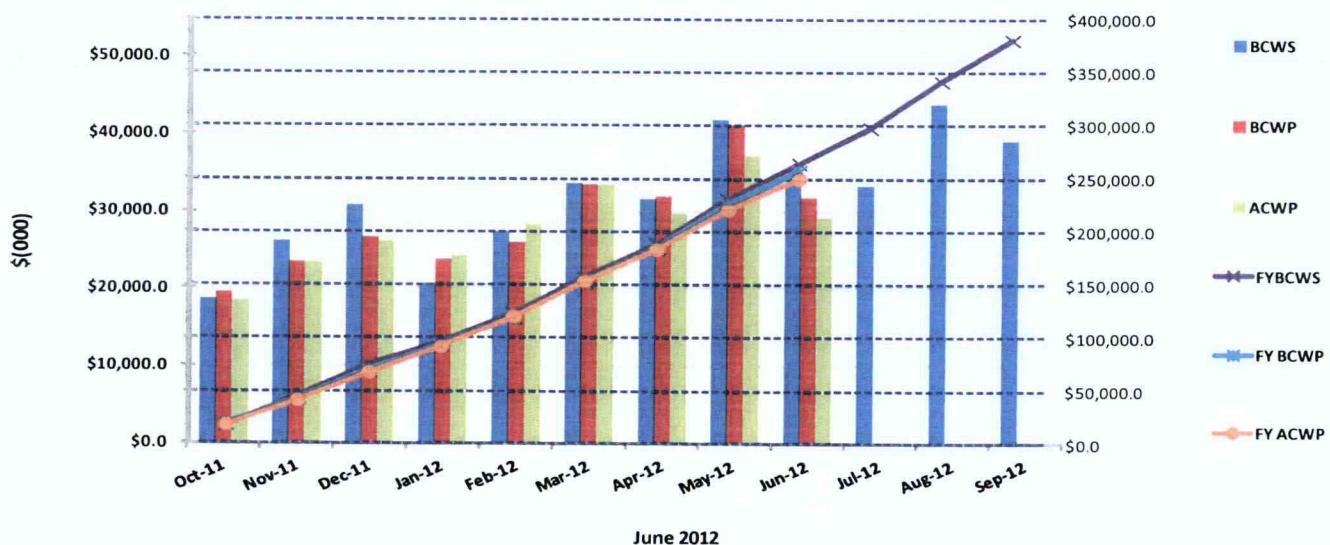
### June EVMS Data

WRPS Project Performance - (\$k)										
	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	BAC	EAC	VAC
CM	33,827.2	31,750.9	29,176.7	(2,076.3)	2,574.2	0.94	1.09			
FYTD	264,138.7	257,348.3	249,793.5	(6,790.4)	7,554.8	0.97	1.03	380,370.0	367,424.5	12,945.5
CTD	1,489,306.2	1,476,398.1	1,412,923.7	(12,908.1)	63,474.4	0.99	1.04	2,163,432.6	2,087,613.7	75,818.9

Red shaded cells indicates a SPI/CPI less than .90;  
 Green shaded cells indicate a SPI/CPI between .90 and .99; and  
 Blue shaded indicates a SPI/CPI greater than or equal to 1.

### Office of River Protection (ORP-0014) Fiscal Year 2012 - Monthly EVMS

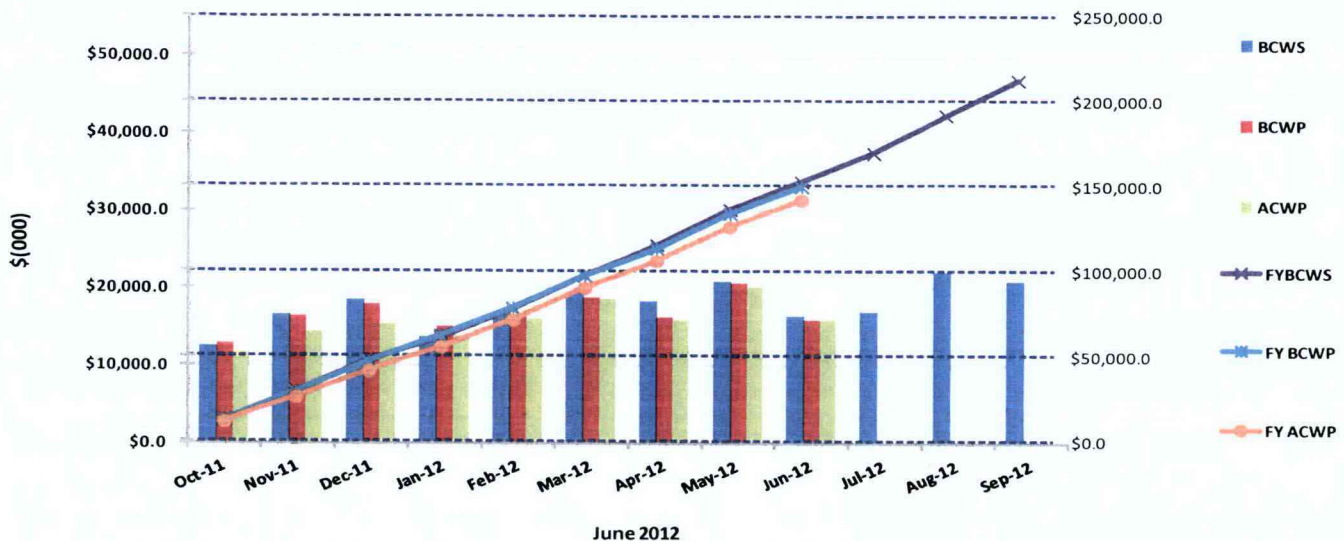
EVMS Monthly and Fiscal Year Values - ORP-0014



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-11	\$18,559.4	\$19,444.2	\$18,408.0	1.05	1.06	\$18,559.4	\$19,444.2	\$18,408.0	1.05	1.06
Nov-11	\$26,121.7	\$23,436.0	\$23,336.0	0.90	1.00	\$44,681.1	\$42,880.2	\$41,744.0	0.96	1.03
Dec-11	\$30,678.0	\$26,611.0	\$26,115.0	0.87	1.02	\$75,359.1	\$69,491.2	\$67,859.0	0.92	1.02
Jan-12	\$20,716.5	\$23,741.2	\$24,148.4	1.15	0.98	\$96,075.6	\$93,232.4	\$92,007.4	0.97	1.01
Feb-12	\$27,334.7	\$26,007.7	\$28,261.8	0.95	0.92	\$123,410.3	\$119,240.1	\$120,269.2	0.97	0.99
Mar-12	\$33,615.5	\$33,405.7	\$33,466.4	0.99	1.00	\$157,025.8	\$152,645.8	\$153,735.6	0.97	0.99
Apr-12	\$31,512.7	\$31,843.8	\$29,637.5	1.01	1.07	\$188,538.5	\$184,489.6	\$183,373.1	0.98	1.01
May-12	\$41,772.6	\$41,107.6	\$37,244.1	0.98	1.10	\$230,311.1	\$225,597.2	\$220,617.2	0.98	1.02
Jun-12	\$33,827.2	\$31,750.9	\$29,176.7	0.94	1.09	\$264,138.3	\$257,348.1	\$249,793.9	0.97	1.03
Jul-12	\$33,196.1	\$0.0	\$0.0	0.00	0.00	\$297,334.4			0.00	0.00
Aug-12	\$43,890.6	\$0.0	\$0.0	0.00	0.00	\$341,225.0			0.00	0.00
Sep-12	\$39,144.6	\$0.0	\$0.0	0.00	0.00	\$380,369.6			0.00	0.00
CTD	\$1,489,306.2	\$1,476,398.1	\$1,412,923.7	0.99	1.04					

## Office of River Protection (ORP-0014) Fiscal Year 2012 - Monthly EVMS

## Base Operations 5.01



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-11	\$12,392.2	\$12,786.7	\$11,613.8	1.03	1.10	\$12,392.2	\$12,786.7	\$11,613.8	1.03	1.10
Nov-11	\$16,611.9	\$16,361.1	\$14,369.5	0.98	1.14	\$29,004.1	\$29,147.8	\$25,983.3	1.00	1.12
Dec-11	\$18,475.0	\$17,939.2	\$15,354.0	0.97	1.17	\$47,479.1	\$47,087.0	\$41,337.3	0.99	1.14
Jan-12	\$13,582.4	\$14,954.3	\$13,803.4	1.10	1.08	\$61,061.5	\$62,041.3	\$55,140.7	1.02	1.13
Feb-12	\$16,737.0	\$16,169.5	\$16,105.1	0.97	1.00	\$77,798.5	\$78,210.8	\$71,245.8	1.01	1.10
Mar-12	\$19,272.8	\$18,703.5	\$18,623.5	0.97	1.00	\$97,071.3	\$96,914.3	\$89,869.3	1.00	1.08
Apr-12	\$18,206.1	\$16,155.1	\$15,909.1	0.89	1.02	\$115,277.4	\$113,069.4	\$105,778.4	0.98	1.07
May-12	\$20,828.7	\$20,643.6	\$20,118.7	0.99	1.03	\$136,106.1	\$133,713.0	\$125,897.1	0.98	1.06
Jun-12	\$16,312.2	\$15,867.6	\$15,822.5	0.97	1.00	\$152,418.3	\$149,580.6	\$141,719.6	0.98	1.06
Jul-12	\$16,942.0	\$0.0	\$0.0	0.00	0.00	\$169,360.3			0.00	0.00
Aug-12	\$22,029.1	\$0.0	\$0.0	0.00	0.00	\$191,389.4			0.00	0.00
Sep-12	\$20,752.6	\$0.0	\$0.0	0.00	0.00	\$212,142.0			0.00	0.00
CTD	\$975,602.2	\$971,099.8	\$939,915.9	1.00	1.03					

**Base Operations****Schedule Variance (\$-444.5K):**

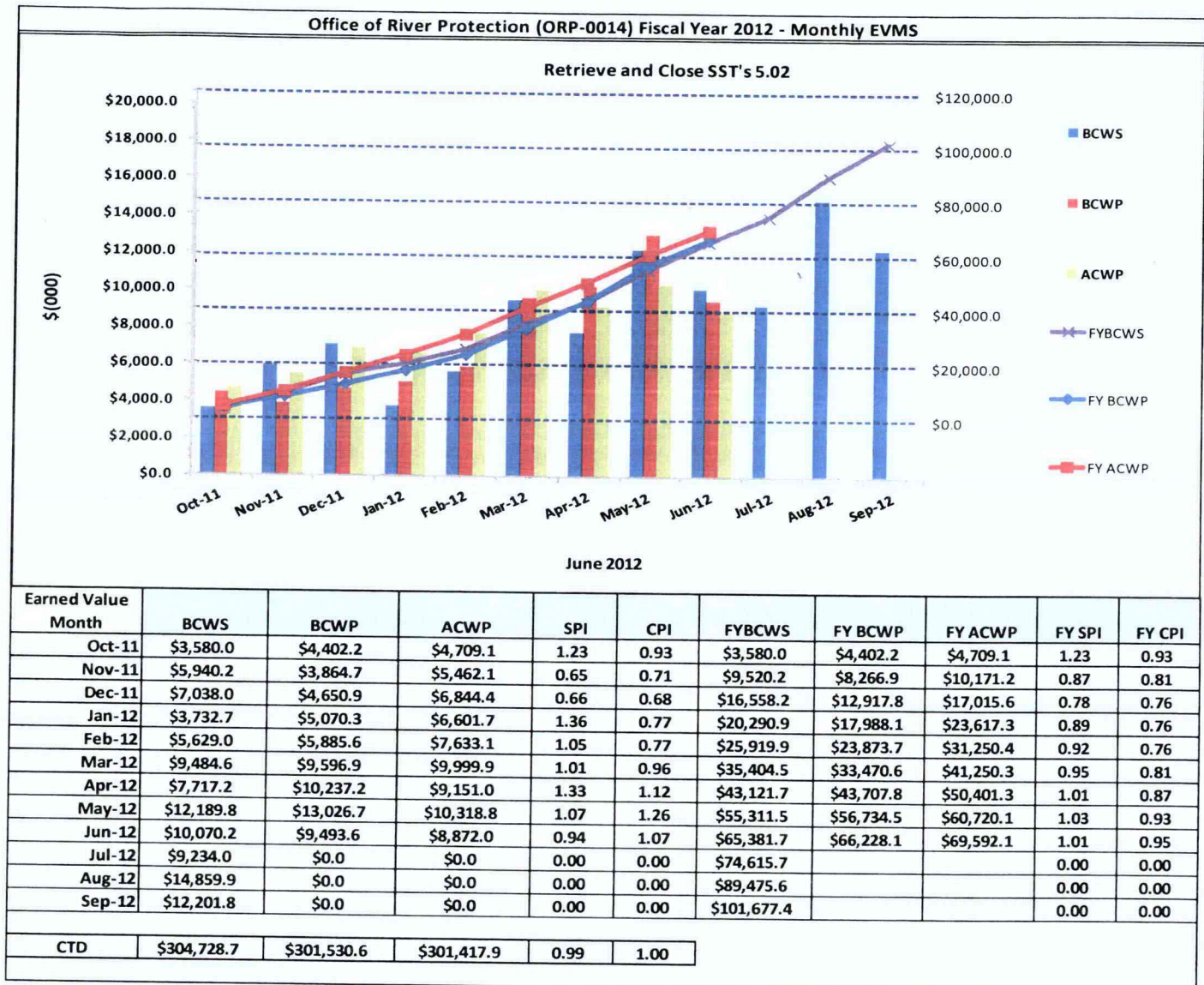
The unfavorable schedule variance is primarily due to:

- AY/AZ Farm Infrastructure due to a three-month delay in the receipt of the PUREX connector components and 2-inch nozzles, which are now expected to be received in September. These procurements are tied up in larger company procurements, which have been delayed due to fabricator priorities and completion of commercial-grade dedication paperwork. In addition, there was a one-month delay to the start of the raw water line installation and site preparation for installation of the transformer, which was a result of the delayed award of the construction contract.

**Cost Variance (\$45.2K):**

Variance is negligible





### Single-Shell Tanks

#### Schedule Variance (-\$576.46K):

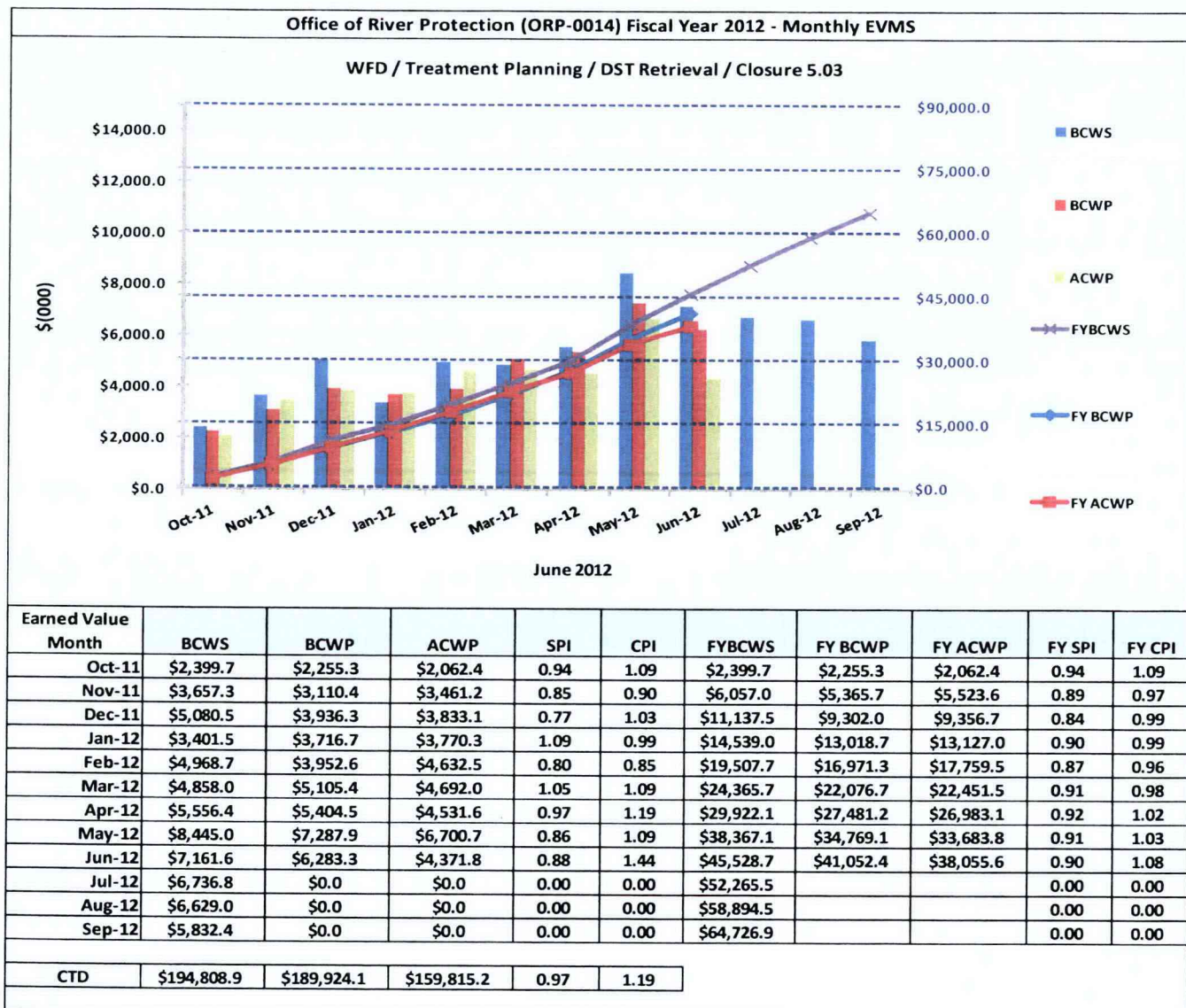
The unfavorable schedule variance is primarily due to:

- C-101 Retrieval due to delays in receiving long-lead procurements, specifically the Extended Reach Sluicer Systems (ERSS), which were planned for May and June. The first two ERSS' will be delivered in July. Hose testing issues, including kinking of replacement hoses during June, have contributed to delays. In addition, equipment removal activities were delayed by unfavorable weather, ventilation availability, and an obstruction in riser 1. Issues have been resolved and new equipment installation activities started in early July.
- C-102 Retrieval due to delays in the receipt of the ERSS's which were planned to be received in June but due to hose testing issues they are not expected until August. In addition, equipment removal activities were delayed due to unfavorable weather, ventilation availability and work on riser 2. The new riser has been successfully welded and crews will return to completing the balance of equipment removals activities.

Cost Variance (\$621.9K):

The favorable cost variance is primarily due to:

- C-107 Retrieval due to cost-efficient retrieval operations using the new MARS-V system. Retrieval operations resumed in late May and continued throughout June.
- C-101 Retrieval due to efficiencies achieved in Retrieval System Installation. A subcontractor construction forces crew of limited size was deployed on three tank projects (C-101, C-102, and C-105). When contaminated soil was encountered on C-102 riser 2, an additional crew was deployed to reduce personnel radiological exposure, which reduced the remaining crew on C-101. The crew worked very efficiently on C-101 completed equipment removal with less labor than planned.

**Waste Feed Delivery/Treatment/DST Retrieval Closure**Schedule Variance (-\$878.3K):

The unfavorable schedule variance is primarily due to:

- Waste Feed Delivery System Performance due to delays associated with initial Scaled Performance testing and Limits of Performance testing caused by equipment failures. Equipment failures were experienced on both the small-scale mixing demonstration platform and the remote sampler



demonstration platform due to the complex simulants being used for this testing that have not been used in previous tests. A recovery plan is being developed with the testing subcontractor.

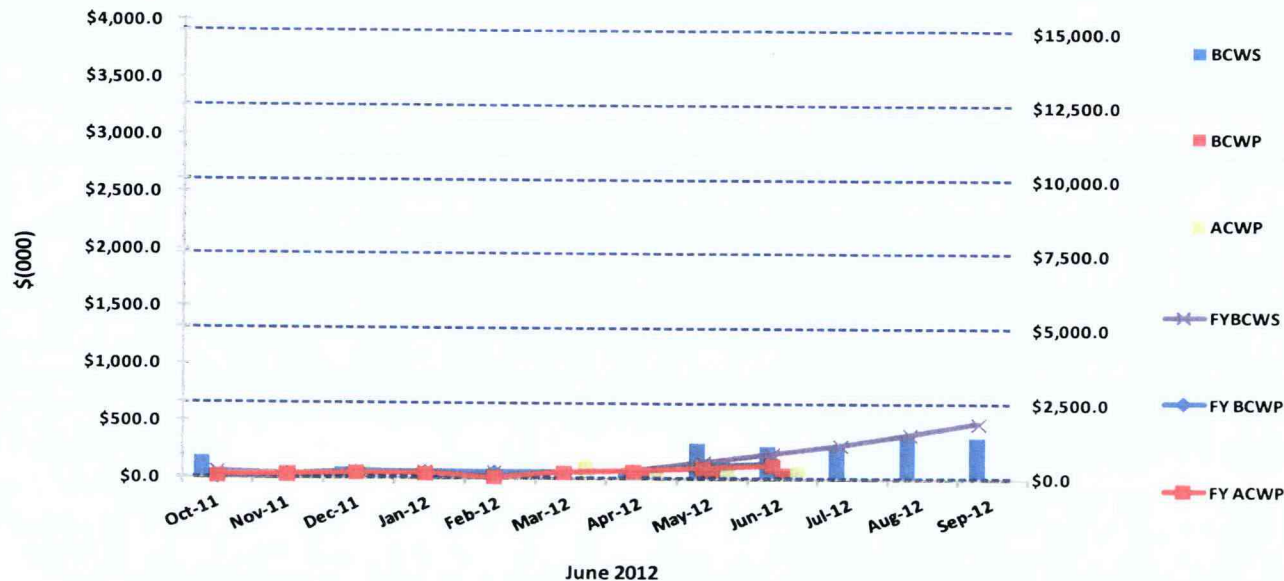
Cost Variance \$1,911.5K:

The favorable cost variance is primarily due to:

- WFD Tank Mixing and Sampling due to over-reporting of earned value performance for the month. The rules of performance are being reviewed based on the revised detailed schedule implemented last month, and the fiscal year spend forecast is being evaluated.
- WFD System Performance variance is due to 1) Vendor accrual for testing on the remote sampler demonstration and small-scale mixing demonstration was revised to address an over-accrual of costs in May, resulting in the favorable cost variance.
- Subcontractor cost for Solids Accumulation work is direct-funded to SRNL through an IEWO. This work is budgeted and progress taken in the WRPS performance measurement baseline, but because it is direct-funded to SRNL, actual costs are reported by SRNL, not WRPS, which creates a favorable CV.
- A cost correction for the remote sampler demonstration and the small-scale mixing demonstration. The performance testing is split-funded between (1) WFD Tank Mixing and Sampling which is base funded, and (2) WFD System Performance which is TDD funded. Costs were overstated in WFD System Performance requiring the cost transfer.

## Office of River Protection (ORP-0014) Fiscal Year 2012 - Monthly EVMS

## Supplement Treatment 5.04



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-11	\$187.5	\$0.0	\$22.3	0.00	0.00	\$187.5	\$0.0	\$22.3	0.00	0.00
Nov-11	(\$87.7)	\$99.8	\$43.3	(1.14)	2.30	\$99.8	\$99.8	\$65.6	1.00	1.52
Dec-11	\$84.8	\$84.8	\$83.4	1.00	1.02	\$184.6	\$184.6	\$149.0	1.00	1.24
Jan-12	\$0.0	\$0.0	(\$26.9)	0.00	0.00	\$184.6	\$184.6	\$122.1	1.00	1.51
Feb-12	\$0.0	\$0.0	(\$108.9)	0.00	0.00	\$184.6	\$184.6	\$13.2	1.00	13.98
Mar-12	\$0.0	\$0.0	\$151.0	0.00	0.00	\$184.6	\$184.6	\$164.2	1.00	1.12
Apr-12	\$33.0	\$47.1	\$45.8	1.43	1.03	\$217.6	\$231.7	\$210.0	1.06	1.10
May-12	\$309.1	\$149.4	\$105.9	0.48	1.41	\$526.7	\$381.1	\$315.9	0.72	1.21
Jun-12	\$283.2	\$106.0	\$110.4	0.37	0.96	\$809.9	\$487.1	\$426.3	0.60	1.14
Jul-12	\$283.2	\$0.0	\$0.0	0.00	0.00	\$1,093.1			0.00	0.00
Aug-12	\$372.6	\$0.0	\$0.0	0.00	0.00	\$1,465.7			0.00	0.00
Sep-12	\$357.7	\$0.0	\$0.0	0.00	0.00	\$1,823.4			0.00	0.00
CTD	\$14,166.5	\$13,843.6	\$11,774.7	0.98	1.18					

**Supplemental Treatment**Schedule Variance (-\$177.2)

The unfavorable variance is primarily due to:

- Delay in awarding scope to Savannah River National Laboratory and Oak Ridge National Laboratory using the Inter-Entity Work Order (IEWO) process for Technetium (Tc) Management and Immobilization-Cast Stone Maturation activities. The IEWOs were approved by DOE-ORP and accepted by both labs. The project is forecasting schedule recovery by September 30, 2012, to meet originally scheduled milestones.

Cost Variance (-\$4.4K)

Variance is negligible



## Acquisition of New Facilities

**M-090-11, Complete the Negotiation of No More Than Two Canister Storage Facility Construction Interim Milestones**, Due: 12/31/12, Status: To Be Missed. Formal notification to miss this milestone was provided to Ecology via ORP Letter 12-ECD-0024 on 06/27/12. Please see issues below.

**M-090-00, Acquire/modify facilities for storage of IHLW**, Due: 12/31/2019, Status: On Schedule

**M-047-06, Complete negotiation of no more than two interim milestones governing work necessary to support completion of M-047-00**, Due: 06/30/12, Status: Missed. Formal notification to miss this milestone was provided to Ecology via ORP Letter 12-ECD-0024 on 06/27/12. Please see issues below.

**M-047-00, Complete Work Necessary to provide facilities for management of secondary waste from the WTP**, Due: 12/31/2022, Status: On Schedule

### Significant Past Accomplishments:

Interim Hanford Storage: Nothing to Report. The Secondary Liquid Waste Treatment Project issued a number of conceptual design supporting documents and is on schedule to complete the Conceptual Design Report and deliver the CD-1 package to ORP before 8/30/12.

### Significant Planned Actions in the Next Six Months:

- Submit the Secondary Liquid Waste Treatment Project CD-1 Package to ORP.

### Issues:

ORP submitted signed TPA Change Packages M-47-12-01 and M-90-12-01 to Ecology on 06/13/12 to defer negotiation of these milestones to a To Be Determined (TBD) date to be established 12 months following completion of the River Protection Plan (RPP) Waste Treatment Plant (WTP) re-baseline/re-planning efforts. Ecology provided letters 12-NWP-101 and 12-NWP-100 disapproving M-47-12-01 and M-90-12-01 TPA Change Packages to ORP on 06/25/12. Formal notification to miss milestones M-047-06 and M-090-11 provide to Ecology via ORP Letter 12-ECD-0024 on 06/27/12. Ecology issued a Notice of Violation (NOV) for M-047-06 on 07/12/12 per letter 12-NWP-118. ORP received Ecology letter 12-NWP-122, Docket Number 9402, stipulating a penalty of \$5,000 for missing M-047-06 on 07/19/12. ORP paid this penalty on 07/27/12.

## **Supplemental Treatment and Part B Permit Applications**

**M-062-40ZZ, Submit a one-time Tank Waste Supplemental Treatment Technologies report if a supplemental treatment technology is proposed other than a 2nd LAW, Due:** 10/31/2014, Status: On Schedule.

**M-062-45ZZ, Negotiate a one-time supplemental treatment selection, Due:** 4/30/2015, Status: On schedule. Negotiations are not yet underway.

**M-062-45ZZ-A, Convert M-062-31-T01 through M-062-34-T01 to Interim Milestones, Due:** 4/30/2015, Status: On Schedule.

**M-062-31-T01, Complete final design and submit RCRA Part B permit mod request, Due:** 4/30/2016, Status: On schedule

**M-062-32-T01, Start construction of supplemental vitrification treatment facility and/or WTP enhancements, Due:** 4/30/2018, Status: On schedule

**M-062-33-T01, Complete construction of supplemental vitrification treatment facility and/or WTP enhancements, Due:** 4/30/2021, Status: On schedule

**M-062-45XX, No later than 12/31/2021, the DOE and Ecology shall complete negotiations to establish a mechanism that will apply to resolve future disputes regarding the determinations in M-062-45, paragraphs 4 and 5, due:** 12/31/2021, Status: On Schedule

**M-062-34-T01, Complete hot commissioning of supplemental vitrification treatment facility and/or WTP enhancements, Due:** 12/30/2022, Status: On schedule

**M-062-21, Annually, submit data that demonstrates operation of the WTP, Due:** 2/28/2023, Status: On Schedule

**M-062-00, Complete Pretreatment Processing and Vitrification of HLW and LAW Tank Wastes, Due:** 12/31/2047, Status: On Schedule

### **Significant Past Accomplishments:**

None

### **Significant Planned Actions in the Next Six Months:**

None

### **Issues:**

None



## System Plan

**M-062-40B, Submit a system plan describing the disposition of all tank waste managed by ORP,** Due: 10/31/2011, Status: Completed 10/24/2011 via DOE-ORP/ECY joint signature letter 11-TPD-087.

**M-062-40C, Select a minimum of three scenarios that will be analyzed in the system plan,** Due: 10/31/2013, Status: On Schedule

**M-062-40D, Submit a system plan describing the disposition of all tank waste managed by ORP,** Due: 10/31/2014, Status: On Schedule

**M-062-45-T01, Every six years, within six-months after last revision of the System Plan, negotiate tank waste retrieval sequencing,** Due: 4/30/2015, Status: On Schedule

### Significant Past Accomplishments:

DOE/ORP submitted the River Protection Project System Plan, Revision 6, with a joint Ecology signature to EPA on October 24, 2011.

### Significant Planned Actions in the Next Six Months:

None

### Status:

During the May 2012 ORP/Ecology TPA Quarterly Meeting, it was stated that five proposed/draft scenarios/cases were submitted to Washington River Protection Solutions LLC (WRPS) for System Plan 6 Addendum (SP6A). No verbal or written direction has been provided to WRPS to begin simulation/modeling of the proposed/draft scenarios.

Since then, various circumstances have occurred, in which the five proposed/draft scenarios are no longer considered scenarios. No new scenarios have been proposed for SP6A. System Plan 7 is still on schedule to begin in the May-August 2013 time frame.

### Issues:

None

**WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) PROJECT**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
M-062-01Y	Submit Semi-Annual TPA Project Compliance Report	07/31/2012	Completed – Report hand-delivered on 07/27/2012
M-062-01Z	Submit Semi-Annual TPA Project Compliance Report	01/31/2013	On Schedule

**\*SEE THE AUGUST 2012 ORP CONSENT DECREE 08-5085-FVS  
MONTHLY SUMMARY REPORT FOR WTP FACILITY-SPECIFIC  
INFORMATION**

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**FINAL**

Office of River Protection  
Consent Decree 08-5085-FVS  
Monthly Summary Report  
August 2012

Office of River Protection  
Consent Decree 08-5085-FVS  
Monthly Summary Report  
August 2012

Page	Topic	Leads
3	Statistics / Status	James Lynch / Dan McDonald / Jeff Lyon
5	SST Retrieval and Closure – D-00B-01, -02, -03, -04	Chris Kemp / Jeff Lyon
6	Tank Waste Retrieval Work Plan (TWRWP) Status – Consent Decree Appendix C	Chris Kemp / Jeff Lyon
7	SST Retrieval Monthly and Fiscal Year EVMS Data	Janet Diediker / Jeff Lyon
9	WTP - Immobilization Plant Project – D-00A-06, D-00A-17, D-00A-01	Delmar Noyes / Dan McDonald
11	WTP Pretreatment (PT) Facility – D-00A-18, -19, -13, -14, -15, 16	Wahed Abdul / Dan McDonald
14	High-Level Waste (HLW) Facility – D-00A-20, -21, 02, 03	Wahed Abdul / Dan McDonald
17	Low-Activity Waste (LAW) Facility – D-00A-07, -08, -09	Jeff Bruggeman / Dan McDonald
20	Balance of Facilities (BOF) – D-00A-12	Jason Young / Dan McDonald
22	Analytical Laboratory (LAB) – D-00A-005	



Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2012</b>				
D-00C-02L	Submit to Ecology and Oregon Monthly Summary Reports	10/31/11	10/25/11	Completed
D-00C-02M	Submit to Ecology and Oregon Monthly Summary Reports	11/30/11	11/21/11	Completed
D-00C-02N	Submit to Ecology and Oregon Monthly Summary Reports	12/31/11	12/27/11	Completed
D-00C-02O	Submit to Ecology and Oregon Monthly Summary Reports	01/31/12	01/25/12	Completed
D-00C-01D	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	01/31/12	01/27/12	Completed
D-00C-02P	Submit to Ecology and Oregon Monthly Summary Reports	02/29/12	02/22/12	Completed
D-00C-02Q	Submit to Ecology and Oregon Monthly Summary Reports	03/31/12	03/31/12	Completed
D-00C-02R	Submit to Ecology and Oregon Monthly Summary Reports	04/30/12	04/26/12	Completed
D-00C-02S	Submit to Ecology and Oregon Monthly Summary Reports	05/31/12	05/29/12	Completed
D-00C-02T	Submit to Ecology and Oregon Monthly Summary Reports	06/30/12	06/29/12	Completed
D-00C-02U	Submit to Ecology and Oregon Monthly Summary Reports	07/31/12	07/26/12	Completed
D-00C-01E	Submit to Ecology and Oregon Semi-Annual Report Documenting Progress During Previous 6 Month Period	07/31/12	07/27/12	Completed
D-00C-02V	Submit to Ecology and Oregon Monthly Summary Reports	08/31/12		On-going
D-00C-02W	Submit to Ecology and Oregon Monthly Summary Reports	09/30/12		On-going
<b>Fiscal Year 2013</b>				
D-00C-02X	Submit to Ecology & State of Oregon Monthly Summary Report	10/31/2012		On-going
**D-00C-02Y	Submit to Ecology & State of Oregon Monthly Summary Report	11/30/2012		On-going
** Future Monthly Reports will be added as necessary to maintain a two-months ahead activity.				
D-00A-05	LAB Construction Substantially Complete	12/31/2012		On-going
D-00A-12	Steam Plant Construction Complete	12/31/2012		On-going
D-00A-21	Complete Construction of Structural Steel to EL. 37' in HLW Fac.	12/31/2012		On-going

Milestone	Title	Due Date	Completion Date	Status
<b>Fiscal Year 2013 Continued</b>				
D-00C-01F	Submit to Ecology & State of Oregon Semi-Annual Report	01/31/2013		On-going
D-00C-01G	Submit to Ecology & State of Oregon Semi-Annual Report	07/31/2013		On-going
D-006-00-A1	Provide State of Oregon Notice of Meetings	09/25/2013		On-going

## Reports

**D-00C-01 series, Submit to Ecology & State of Oregon Semi-Annual Report, Due:** Semi-Annually – January 31<sup>st</sup> and July 31<sup>st</sup> of each year. Status: On-going

**D-00C-02 series, Submit to Ecology & State of Oregon Monthly Summary Report Documenting Progress During Previous Month, Due:** End of Each Month, Status: On-going

**D-006-00-A1, Provide State of Oregon notice of meetings in D-006-00-A, etc. no less than 30 days before they are scheduled, Due:** 9/25/2013, Status: On-going

**D-006-00-A, Meet Approximately Every Three Years After Entry of Decree to review requirements of the Consent Decree, Due:** 10/25/2013, Status: On-going



## **SST Retrieval Program**

**D-00B-01, Complete Retrieval of Tank Wastes from 10 Remaining SSTs in WMA-C, Due:** 9/30/2014, Status: On-going

**D-00B-01A thru J, Submit Tank Retrieval Complete Certification, Due:** TBD

Pursuant to the requirement in Section IV-B-5 of the Consent Decree (CD) DOE must submit to Ecology a written certification that DOE has completed retrieval of a tank in accordance with the requirements of Appendix "C", Part 1, of the CD. Tanks currently in retrieval status are C-104, C-107, C-108, C-109, C-110, C-111, and C-112.

**D-00B-02, Advise Ecology of the 9 SSTs from which Waste Will Be Retrieved by 2022, Due:** 9/30/2014, Status: Complete. ORP and Ecology began meeting in December 2010 to discuss the selection of the next nine tanks from which waste will be retrieved and why ORP believes those nine tanks should be in A/AX Farms. The last meeting was held on August 24, 2011. At this meeting, Ecology stated that it believes the requirements of D-00B-02 of the Consent Decree have been met.

**D-00B-03, Initiate Startup Retrieval in At Least 5 of 9 SSTs in D-00B-02, Due:** 12/31/2017, Status: On-going

**D-00B-04, Complete Retrieval of Tank Wastes from the 9 SSTs in D-00B-02, Due:** 9/30/2022, Status: On-going

**D-00B-04A thru I, Submit Tank Retrieval Complete Certification, Due:** TBD

### **Significant Past Accomplishments:**

1. Completed removal of legacy (long length) equipment at C-101.
2. Continued procurement for C-101 & 102 modified sluicing retrieval systems.
3. Continued removal of legacy (long length) equipment in C-102.
4. Continued hard heel retrieval activities on C-104 with recirculation of caustic.
5. Continued construction activities for removal of equipment at C-105 to support large riser installation.
6. Continued modifying ventilation system to add C-105 to the new exhaust system installed for C-102.
7. Continued C-107 retrieval utilizing the MARS system (approximately 80% of waste retrieved).
8. Completed removal of failed C-109 slurry pump to support hard heel removal.
9. Completed installation of new C-109 slurry pump and initiated hard heel retrieval by transferring 55K gallons of dissolution water to AN-106.

### **Significant Planned Activities in the Next Six Months:**

1. Complete construction/installation of the modified sluicing system in C-101.
2. Complete removal of legacy equipment at C-102.
3. Complete construction/installation of the modified sluicing system in C-102.
4. Complete hard heel removal of waste at C-104.

5. Complete installation of the C-105 ventilation system and removal of equipment.
6. Complete installation of the large riser in C-105.
7. Complete C-107 bulk retrieval.
8. Complete C-107 hard heel retrieval.
9. Obtain C-108 Post-Retrieval samples using the Off Riser Sampling System.
10. Complete discussions with Ecology on the retrieval certificate of completion.

**Issues:**

None.

**Tank Waste Retrieval Work Plan (TWRWP) Status**

<b>Tank</b>	<b>TWRWP</b>	<b>Expected Revisions</b>	<b>Retrieval Technology</b>	<b>Second Technology</b>	<b>Third Technology</b>
C-101	RPP-22520	Complete	MRS (per 10/7/10 agreement, to be Modified Sluicing)	Chemical Dissolution	-
C-102	RPP-22393	Complete	Modified Sluicing	Chemical Dissolution	-
C-104	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-
C-105	RPP-22520	In Process	MARS-V	High pressure water spray/M A RS platform	-
C-107	RPP-22393	In Process	MARS-S	MARS-High Pressure	-
C-108	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-
C-109	RPP-21895	After evaluation of C-108 hard heel retrieval	Modified Sluicing	Chemical Dissolution	-
C-110	RPP-33116	After evaluation of C-108 hard heel retrieval	Modified Sluicing	None (to be revised to In-Tank Vehicle)	-
C-111	RPP-37739	After evaluation of C-108 hard heel retrieval	Modified Sluicing	None (to be revised to In-Tank Vehicle)	-
C-112	RPP-22393	In Process	Modified Sluicing	Chemical Dissolution	-

**Significant Accomplishments**

None.

**Significant Planned Activities in the Next 6 Months:**

Work with Ecology on updates to TWRWPs RPP-22520, RPP-22393, and RPP-37739 for tanks C-101, C-102, and C-111, respectively.

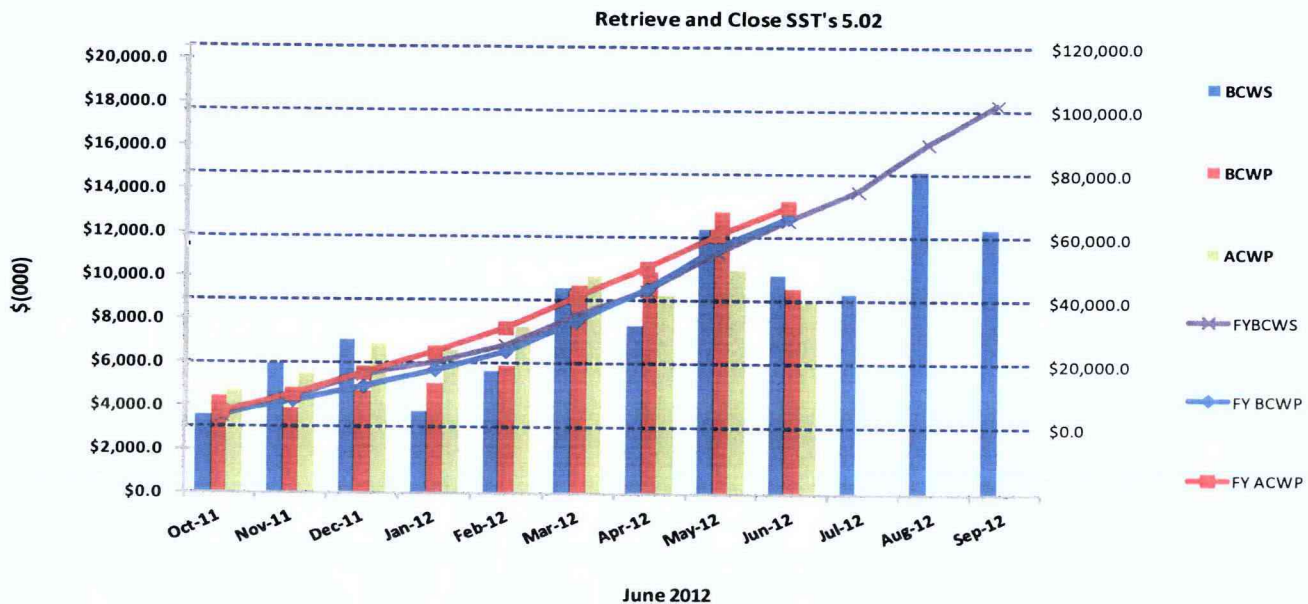
**Issues:**

None.



## SST Retrieval Monthly and Fiscal Year EVMS Data

Office of River Protection (ORP-0014) Fiscal Year 2012 - Monthly EVMS



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FYBCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct-11	\$3,580.0	\$4,402.2	\$4,709.1	1.23	0.93	\$3,580.0	\$4,402.2	\$4,709.1	1.23	0.93
Nov-11	\$5,940.2	\$3,864.7	\$5,462.1	0.65	0.71	\$9,520.2	\$8,266.9	\$10,171.2	0.87	0.81
Dec-11	\$7,038.0	\$4,650.9	\$6,844.4	0.66	0.68	\$16,558.2	\$12,917.8	\$17,015.6	0.78	0.76
Jan-12	\$3,732.7	\$5,070.3	\$6,601.7	1.36	0.77	\$20,290.9	\$17,988.1	\$23,617.3	0.89	0.76
Feb-12	\$5,629.0	\$5,885.6	\$7,633.1	1.05	0.77	\$25,919.9	\$23,873.7	\$31,250.4	0.92	0.76
Mar-12	\$9,484.6	\$9,596.9	\$9,999.9	1.01	0.96	\$35,404.5	\$33,470.6	\$41,250.3	0.95	0.81
Apr-12	\$7,717.2	\$10,237.2	\$9,151.0	1.33	1.12	\$43,121.7	\$43,707.8	\$50,401.3	1.01	0.87
May-12	\$12,189.8	\$13,026.7	\$10,318.8	1.07	1.26	\$55,311.5	\$56,734.5	\$60,720.1	1.03	0.93
Jun-12	\$10,070.2	\$9,493.6	\$8,872.0	0.94	1.07	\$65,381.7	\$66,228.1	\$69,592.1	1.01	0.95
Jul-12	\$9,234.0	\$0.0	\$0.0	0.00	0.00	\$74,615.7			0.00	0.00
Aug-12	\$14,859.9	\$0.0	\$0.0	0.00	0.00	\$89,475.6			0.00	0.00
Sep-12	\$12,201.8	\$0.0	\$0.0	0.00	0.00	\$101,677.4			0.00	0.00
CTD	\$304,728.7	\$301,530.6	\$301,417.9	0.99	1.00					

### Single-Shell Tanks

#### Schedule Variance (-\$576.46K):

The unfavorable schedule variance is primarily due to:

- C-101 Retrieval due to delays in receiving long-lead procurements, specifically the Extended Reach Sluicer Systems (ERSS), which were planned for May and June. The first two ERSS' will be delivered in July. Hose testing issues, including kinking of replacement hoses during June, have contributed to delays. In addition, equipment removal activities were delayed by unfavorable weather, ventilation availability, and an obstruction in riser 1. Issues have been resolved and new equipment installation activities started in early July.
- C-102 Retrieval due to delays in the receipt of the ERSS's which were planned to be received in June but due to hose testing issues they are not expected until August. In addition, equipment removal activities were delayed due to unfavorable weather, ventilation availability and work on riser 2. The new riser has been successfully welded and crews will return to completing the balance of equipment removals activities.

Cost Variance (\$621.9K):

The favorable cost variance is primarily due to:

- C-107 Retrieval due to cost-efficient retrieval operations using the new MARS-V system. Retrieval operations resumed in late May and continued throughout June.
- C-101 Retrieval due to efficiencies achieved in Retrieval System Installation. A subcontractor construction forces crew of limited size was deployed on three tank projects (C-101, C- 102, and C-105). When contaminated soil was encountered on C-102 riser 2, an additional crew was deployed to reduce personnel radiological exposure, which reduced the remaining crew on C-101. The crew worked very efficiently on C-101 and completed equipment removal with less labor than planned.



**WASTE TREATMENT AND IMMOBILIZATION PLANT (WTP) PROJECT**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
D-00A-06	Complete Methods Validations	12/31/2017	On-going* (see issues below)
D-00A-17	Hot Start of Waste Treatment Plant	12/31/2019	On-going* (see issues below)
D-00A-01	Achieve Initial Plant Operations for WTP	12/31/2022	On-going* (see issues below)

The WTP Project currently employs approximately 2,515 Full-Time Equivalent (FTE) contractor (Bechtel National, Inc. [BNI]) and subcontractor personnel, including 591 craft, 534 non-manual, and about 140 subcontractor personnel FTEs working at the WTP construction site (all facilities). As of June 2012, the project was 65 percent complete overall, design and engineering was 86 percent complete, procurement was 70 percent complete, construction was 62 percent complete, and startup and commissioning was 15 percent complete.

The overall WTP Project schedule variance in June was a negative \$63.7 M; the cost variance was a negative \$47 M. The cost variance was primarily related to Engineering Design, Construction Crafts, and Plant Equipment; and the schedule variance was primarily related to Engineering Design, Plant Equipment, VCT & Process Technology and Environmental & Nuclear Safety.

Following is the status through the end of June for current project issues.

**Significant Past Accomplishments:**

- Completed the High Level Waste (HLW) vessel RLD-00008 weld discrepancies Extent of Condition review and evaluated the results (PT)
- Completed installation of HDH-VSL-1 on trolley in canister rinse tunnel (HLW)
- Completed installation of platform steel to support CO<sub>2</sub> decontamination piping (LAW)
- Completed 8 week walk down for WTP switchgear building 87 (BOF)
- Completed installation of Crane #13 at the south end of the hotcell (LAB)

**Significant Planned Actions in the Next Six Months:**

- Issue the final report documenting the results from the entrainment coefficient testing for the PVV system (PT)
- Receive Plant Wash and Drains vessel (RLD-VSL-8) (HLW)
- Complete 37' structural steel (HLW)
- Complete installation of melter power supplies (LAW)
- Complete installation of autosampler (ASX system) (LAW)
- Complete construction of the cooling tower (BOF)
- Complete construction of the switchgear building (BOF)
- Complete mechanical installation of autosampling system (LAB)



**Issues:**

- \* Technical issues relevant to the PTF and HLW facilities include, among others, pulse jet mixers, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed issues.
- There are no significant technical issues in LAW, LAB or BOF at this time.

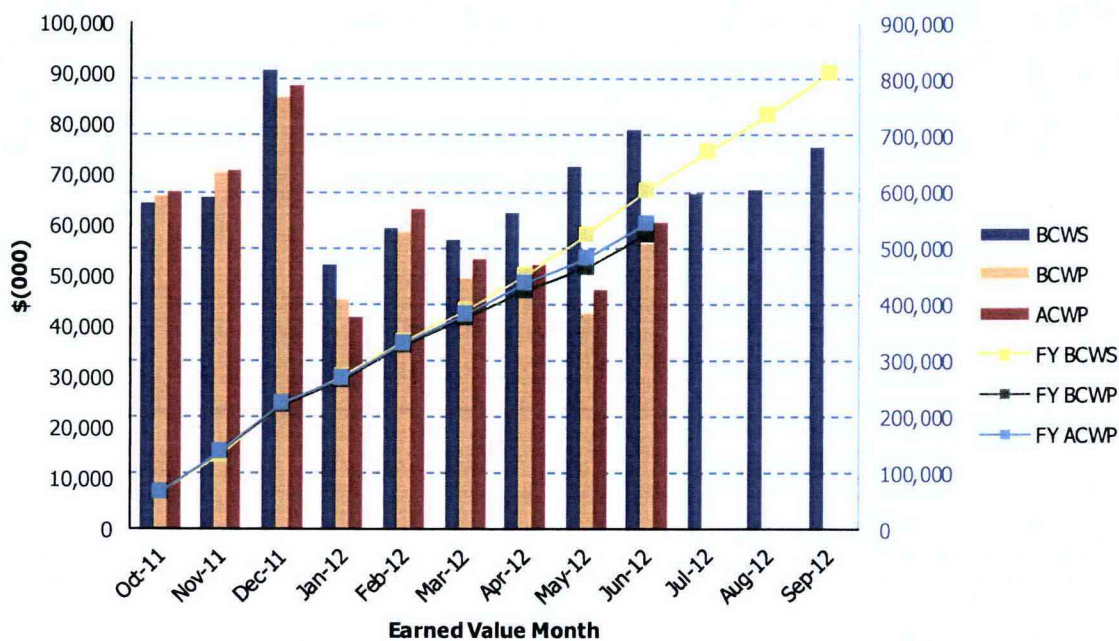
**EXC-01a: Fiscal Year Cost and Schedule Report**

Data Set: FY 2012 Earned Value Data

Data as of: June 2012

**River Protection Project**  
**Waste Treatment Plant (WTP) Project**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2011	\$64,411	\$65,869	\$66,670	1.02	0.99	\$64,411	\$65,869	\$66,670	1.02	0.99
Nov 2011	\$65,647	\$70,625	\$70,879	1.08	1.00	\$130,058	\$136,494	\$137,549	1.05	0.99
Dec 2011	\$90,699	\$85,246	\$87,845	0.94	0.97	\$220,757	\$221,740	\$225,394	1.00	0.98
Jan 2012	\$52,248	\$45,149	\$41,816	0.86	1.08	\$273,005	\$266,889	\$267,210	0.98	1.00
Feb 2012	\$59,271	\$58,579	\$63,201	0.99	0.93	\$332,276	\$325,468	\$330,411	0.98	0.99
Mar 2012	\$57,285	\$49,398	\$53,161	0.86	0.93	\$389,561	\$374,866	\$383,572	0.96	0.98
Apr 2012	\$62,378	\$47,517	\$52,149	0.76	0.91	\$451,939	\$422,383	\$435,721	0.93	0.97
May 2012	\$71,778	\$42,759	\$47,365	0.60	0.90	\$523,717	\$465,142	\$483,086	0.89	0.96
Jun 2012	\$78,891	\$56,530	\$60,446	0.72	0.94	\$602,608	\$521,672	\$543,532	0.87	0.96
Jul 2012	\$66,388			0.00		\$668,996			0.00	
Aug 2012	\$66,879			0.00		\$735,874			0.00	
Sep 2012	\$75,468			0.00		\$811,342			0.00	
PTD	\$7,066,356	\$7,002,626	\$7,049,557	0.99	0.99					

**PRETREATMENT (PT) FACILITY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
D-00A-19	Complete Elevation 98' Concrete Floor Slab in PT Facility	12/31/2014	On-going* (see issues below)
D-00A-13	Complete Installation of Pretreatment Feed Separation Vessels	12/31/2015	On-going* (see issues below)
D-00A-14	PT Facility Construction Substantially Complete	12/31/2017	On-going* (see issues below)
D-00A-15	Start PT Facility Cold Commissioning	12/31/2018	On-going* (see issues below)
D-00A-16	PT Facility Hot Commissioning Complete	12/31/2019	On-going* (see issues below)

The Pretreatment (PT) Facility will separate radioactive tank waste into High Level Waste (HLW) and Low-Activity Waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Through June 2012, the PT Facility was 53 percent complete overall, with engineering design 80 percent complete, procurement 52 percent complete, construction 42 percent complete, and startup and commissioning 4 percent complete.

**Significant Past Accomplishments:**

The Extent of Condition review from the HLW vessel RLD-00008 weld discrepancies has been completed and the results evaluated. Based on the results, a more extensive inspection plan involving the entire black cell and hard to reach vessels has been initiated.

The key on-going activities in Pretreatment are related to the resolution of the Pretreatment Vessel Vent Process (PVP) system design, Hydrogen in Piping and Ancillary Vessels (HPAV), erosion/corrosion and vessel mixing technical issues.

The small scale test report documenting the results to determine realistic entrainment coefficient for the Process Vessel Vent Exhaust (PVV) system was issued in July 2012. The medium scale testing was completed and the report documenting the results will be issued in August 2012. The preliminary results for both the small and medium scale tests resulted in an entrainment coefficient smaller than expected, which supports less extensive modification to the PVV system design.

The Hydrogen Generation Rate (HGR) calculations for HLP-22, HLP-27/28 and HFP have been completed and will be issued in September 2012 after V&V of the software. The remaining calculations in support of resolving the HPAV issue are currently planned to be completed in November 2012.

The implementation plan for the Preliminary Design Safety Analysis (PDSA) update, which will integrate the nuclear safety activities with the vessel design confirmation activities, is scheduled to be issued in September 2012.

The construction of the facility for the 14 foot vessel testing is progressing well.



A revision to the 2010-2 Implementation Plan (IP) is in progress and will address the changes in strategy, approach and expectations. The plan is expected to be issued to the DNFSB in the last quarter of calendar year 2012.

The draft alternative study to identify options for the path forward on the non-Newtonian vessels was completed and the options are being evaluated.

The revised erosion/corrosion action plan is scheduled to be issued in August 2012, and a corrosion test scoping document is expected to be issued in December 2012 to address the material selection issue.

The NQA-1 Computational Fluid Dynamics (CFD) Verification and Validation (V&V) simulant tests will start after the resolution of DOE/NETL comments on the test plan. DOE and BNI have been having meetings and the NETL team is coming to the Hanford site in August to facilitate resolution of the comments. Informational testing in preparation for CFD V&V simulant tests started in July.

**Significant Planned Actions in the Next Six Months:**

- Issue the final report documenting the results from the entrainment coefficient testing for the PVV system
- Complete Hazards and Operability Analysis (HAZOP) for (PVP) system
- Issue the implementation plan for the PDSA update
- Complete the HPAV HGR rate calculations
- Issue the technical scaling selection basis document
- Submit the 2010-2 Implementation Plan revision
- Issue the corrosion test scoping document
- Complete the single PJM (pump down) tests for the 8' vessel in support of the V&V of the CFD program
- Issue jumpers phase 2 frame design for hot cell areas 29, 30 and 33

**Issues:**

\* Technical issues relevant to the PTF and HLW facilities include, among others, pulse jet mixers, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed issues. .

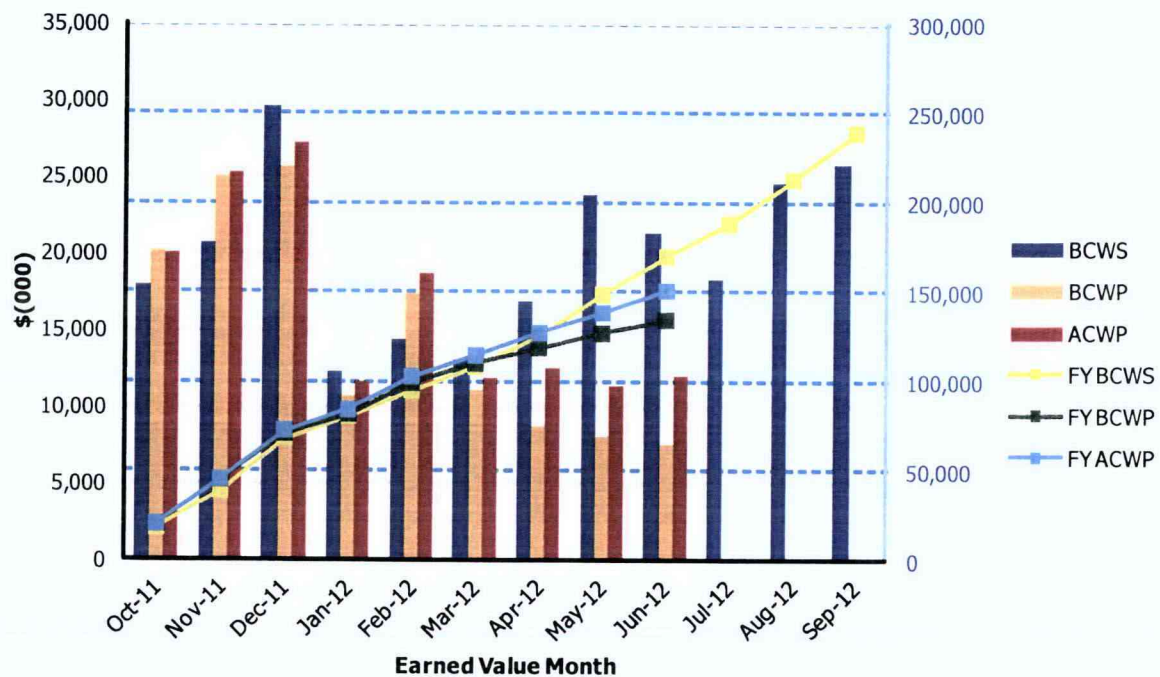


Data Set: FY 2012 Earned Value Data

Data as of: June 2012

### River Protection Project Pretreatment Facility

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2011	\$17,935	\$20,110	\$20,000	1.12	1.01	\$17,935	\$20,110	\$20,000	1.12	1.01
Nov 2011	\$20,616	\$24,945	\$25,222	1.21	0.99	\$38,551	\$45,055	\$45,222	1.17	1.00
Dec 2011	\$29,580	\$25,673	\$27,175	0.87	0.94	\$68,131	\$70,728	\$72,397	1.04	0.98
Jan 2012	\$12,292	\$10,751	\$11,583	0.87	0.93	\$80,423	\$81,479	\$83,980	1.01	0.97
Feb 2012	\$14,371	\$17,367	\$18,675	1.21	0.93	\$94,794	\$98,846	\$102,655	1.04	0.96
Mar 2012	\$13,101	\$11,054	\$11,874	0.84	0.93	\$107,895	\$109,900	\$114,529	1.02	0.96
Apr 2012	\$16,877	\$8,730	\$12,488	0.52	0.70	\$124,772	\$118,630	\$127,017	0.95	0.93
May 2012	\$23,773	\$8,080	\$11,320	0.34	0.71	\$148,545	\$126,710	\$138,337	0.85	0.92
Jun 2012	\$21,271	\$7,567	\$12,061	0.36	0.63	\$169,816	\$134,277	\$150,398	0.79	0.89
Jul 2012	\$18,266			0.00		\$188,082			0.00	
Aug 2012	\$24,560			0.00		\$212,641			0.00	
Sep 2012	\$25,838			0.00		\$238,479			0.00	
PTD	\$1,412,989	\$1,383,776	\$1,371,011	0.98	1.01					

**HIGH-LEVEL WASTE (HLW) FACILITY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
D-00A-21	Complete Construction of Structural Steel to 37' in HLW Facility	12/31/2012	On-going
D-00A-02	HLW Facility Construction Substantially Complete	12/31/2016	On-going* (see issues below)
D-00A-03	Start HLW Facility Cold Commissioning	6/30/2018	On-going* (see issues below)
D-00A-04	HLW Facility Hot Commissioning Complete	12/31/2019	On-going* (see issues below)

The High Level Waste (HLW) Facility will receive the separated high-level waste concentrate from the Pretreatment (PT) Facility. This concentrate will be blended with glass formers and converted into molten glass in one of the two HLW melters and then poured into cylindrical stainless steel canisters. After cooling, the canisters will be sealed and decontaminated prior to shipment to interim storage. The HLW Facility is 60 percent complete overall, with engineering design 87 percent complete, procurement 76 percent complete, construction 42 percent complete, and startup and commissioning is 4 percent complete.

**Significant Past Accomplishments:**

Excellent progress is being made on completion of the Consent Decree Milestone (D-00A-21) "Complete Construction of Structural Steel to 37' in HLW Facility." The current forecast for construction completion is September 2012 compared to the consent decree compliance date of December 31, 2012. All of the materials to complete this milestone have been delivered and are on site. The remaining steel erection consists primarily of 4 beams in the Rinse Tunnel. Prior to setting this steel, work at lower elevations is proceeding in order to utilize efficiencies gained by being able to lift materials in through the roof.

The seismic rails for the decontamination rinse bogie have been set. The Dangerous Waste Permit change notification has been approved so that the rinse bogie can be installed. The rinse bogie and decontamination vessel have been installed in the canister rinse tunnel. The rails will be installed following the setting of the decontamination rinse bogie for final alignment.

75% of the concrete has been poured in the facility with 58ft elevation walls continuing and a majority of the 37ft slabs complete.

Fabrication of Plant Wash and Drain Vessel (RLD-VSL-08) in England was completed; and it was delivered to the Mid-Columbia Engineering Facility in April for further inspection prior to being received and accepted by Bechtel. At this time, Bechtel and the vendor are working on a Corrective Action Plan for RLD-VSL-08 vendor welding issues. The project completed factory acceptance testing on Thermal Catalytic Oxidizers (TCO) which are being fabricated in Colorado. The TCOs are scheduled for delivery to the site in August.

**Significant Planned Actions in the Next Six Months:**

- Complete 37' structural steel
- Receive Thermal Catalytic Oxidizers
- Receive Plant Wash and Drains Vessel (RLD-VSL-8)
- Receive Acidic Waste Vessel (RLD-VSL-7)
- Receive Primary Off-gas Vessel HEME Vessel

**Issues:**

\* Technical issues relevant to the PTF and HLW facilities include, among others, pulse jet mixers, corrosion/erosion in piping and vessels, hydrogen accumulation, and waste feed issues.

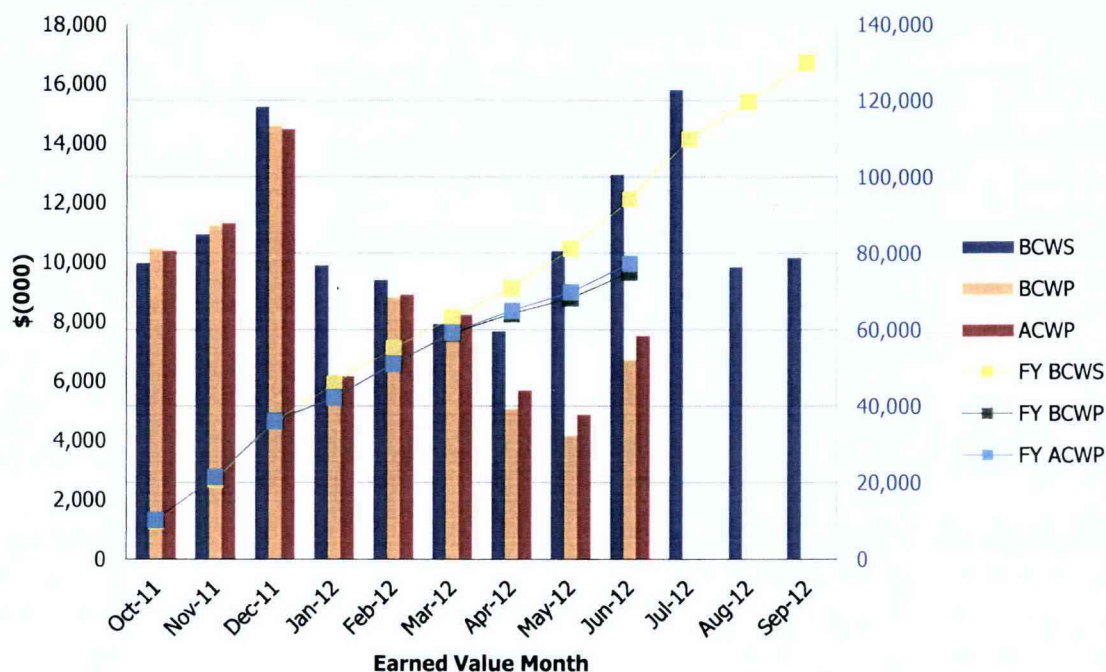


Data Set: FY 2012 Earned Value Data

Data as of: June 2012

### River Protection Project High-Level Waste Facility

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2011	\$9,953	\$10,437	\$10,368	1.05	1.01	\$9,953	\$10,437	\$10,368	1.05	1.01
Nov 2011	\$10,920	\$11,224	\$11,295	1.03	0.99	\$20,873	\$21,661	\$21,663	1.04	1.00
Dec 2011	\$15,209	\$14,578	\$14,472	0.96	1.01	\$36,082	\$36,239	\$36,135	1.00	1.00
Jan 2012	\$9,878	\$6,187	\$6,142	0.63	1.01	\$45,960	\$42,426	\$42,277	0.92	1.00
Feb 2012	\$9,383	\$8,807	\$8,891	0.94	0.99	\$55,343	\$51,233	\$51,168	0.93	1.00
Mar 2012	\$7,900	\$7,901	\$8,221	1.00	0.96	\$63,243	\$59,134	\$59,389	0.94	1.00
Apr 2012	\$7,652	\$5,055	\$5,676	0.66	0.89	\$70,895	\$64,189	\$65,065	0.91	0.99
May 2012	\$10,364	\$4,150	\$4,849	0.40	0.86	\$81,259	\$68,339	\$69,914	0.84	0.98
Jun 2012	\$12,929	\$6,691	\$7,502	0.52	0.89	\$94,188	\$75,030	\$77,416	0.80	0.97
Jul 2012	\$15,787			0.00		\$109,975			0.00	
Aug 2012	\$9,818			0.00		\$119,793			0.00	
Sep 2012	\$10,133			0.00		\$129,926			0.00	
PTD	\$923,681	\$906,656	\$902,474	0.98	1.00					

**LOW-ACTIVITY WASTE (LAW) FACILITY**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
D-00A-07	LAW Facility Construction Substantially Complete	12/31/2014	On-going
D-00A-08	Start LAW Facility Cold Commissioning	12/31/2018	On-going
D-00A-09	LAW Facility Hot Commissioning Complete	12/31/2019	On-going

The Low-Activity Waste (LAW) Facility will vitrify LAW from the Pretreatment (PT) Facility. Waste will be mixed with glass formers, vitrified into glass at a design capacity of 30 metric tons per day, and placed in stainless steel containers that are anticipated to be disposed on the Hanford Site in the Integrated Disposal Facility. The LAW Facility is 69 percent complete overall, with engineering design 85 percent complete, procurement 88 percent complete, construction 71 percent complete, and startup and commissioning is 5 percent complete.

**Significant Past Accomplishments:**

Electrical systems design continues in support of all equipment, controls, and lighting throughout the facility. The system design document for the C1 Ventilation (C1V), C2 Ventilation (C2V) and LAW Stack Discharge Monitoring (SDJ) systems were issued. New configuration data indices were issued for the DC 125-Volt Electrical (DCE), Low-Voltage Electrical (LVE), Medium-Voltage Electrical (MVE), LAW Concentrate Receipt Process (LCP) and Uninterruptible Power Electrical (UPE) systems. Confirmed calculations were issued for the Code Case 2211-1 Overpressure Protection Evaluation of the LAW Primary Off-Gas (LOP) system and Code Case UG-140 Overpressure Protection Evaluation of the LAW Secondary Off-Gas (LVP) system.

New anchorage drawings for elevation +48' rooms L-0309, L-0311 and L-0313 were issued. Piping isometric drawings for the LAW Chilled Water (CHW), Steam Condensate Water (SCW), Radioactive Liquid Waste Disposal (RLD), LAW Melter Feed Process (LFP), and the Carbon Dioxide Gas (CDG) systems were issued. Piping support drawings were issued for the Instrument Service Air (ISA), CHW, CDG, and Autosampling (ASX) systems. Public review of the LAW-027 permit package for the LVP Carbon Bed Adsorber and the LAW-026B permit package for the LVP HEPA Housings ended on July 20, 2012. There were no public comments, the effective date of the permit and the date the equipment can be installed is August 20, 2012. Approval was received from the Washington State Department of Ecology (Ecology) on July 19, 2012 for Hanford Resource Conservation and Recovery Act (RCRA) permit modification 24590-LAW-PCN-ENV-11-055, to incorporate enhanced LAW Melter Feed Process (LFP) system Piping and Instrument Diagrams (P&IDs) into the permit.

Procurement activities for the LAW facility are currently focused on the LVP system components. Engineering review of vendor calculations and vendor interactions continued as a major emphasis during the ongoing procurement of LVP system components. Bubbler density transmitters for the LAW Melter Feed Process (LFP) system were received and three-way plug control valves for the Plant Cooling Water (PCW) system.



The primary areas of construction focus continued to be LAW facility partition wall installation and equipment installation for the Container Finishing Handling (LFH) system. Installation of the decontamination manipulators, finishing line dual-rail hoists, and the trolley/bogie cars for the LFH system continued.

Construction activities were initiated to install structural steel for the fire riser room on the west side of the annex and floor coatings were applied on the second floor of the annex. Leveling pour cave steel plates in the melter bays at elevation +3'. Other on-going construction activities included installation of instrument tubing, scheduled conduit in various planning areas along with unscheduled lighting conduit at elevation +48', and platform installation in the southeast corner of the facility for the CDG system. Electrical work activities continued on LAW Container Pour Handling (LPH) system crane in the buffer storage room and LAW Container Finishing Handling (LFH) system hoist at elevation +28'.

Installation activities were completed for the CDG pipe rack.

Comments were resolved for software functional requirements for the following systems:

- LAW Melter Feed Process System (LFP)
- Carbon Dioxide Gas System (CDG)

**Significant Planned Actions in the Next Six Months:**

- Complete installation of melter power supplies
- Complete installation of Auto Sampling (ASX) system
- Receive HEPA Pre-heaters for LVP system
- Receive HEPA Housings for LVP system
- Receive Thermal Catalytic Oxidizer (TCO) for LVP system

**Issues:**

No major issues at this time.



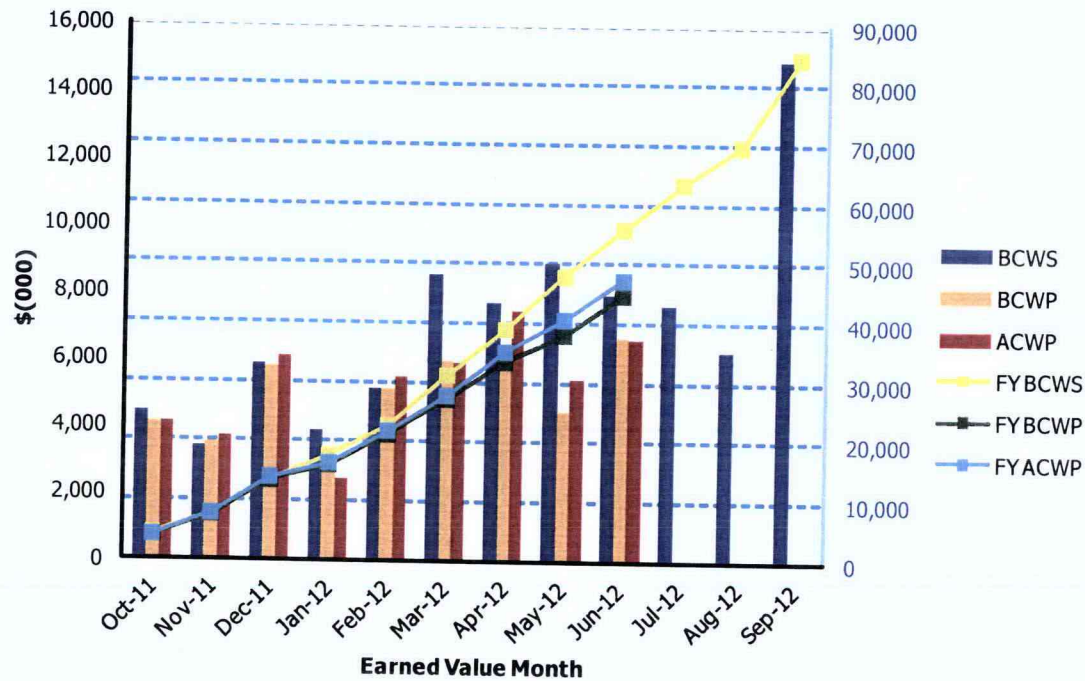
**EXC-01a: Fiscal Year Cost and Schedule Report**

Data Set: FY 2012 Earned Value Data

Data as of: June 2012

**River Protection Project  
Low-Activity Waste Facility**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2011	\$4,415	\$4,115	\$4,104	0.93	1.00	\$4,415	\$4,115	\$4,104	0.93	1.00
Nov 2011	\$3,404	\$3,510	\$3,704	1.03	0.95	\$7,819	\$7,625	\$7,808	0.98	0.98
Dec 2011	\$5,827	\$5,807	\$6,123	1.00	0.95	\$13,646	\$13,432	\$13,931	0.98	0.96
Jan 2012	\$3,886	\$2,617	\$2,412	0.67	1.08	\$17,532	\$16,049	\$16,343	0.92	0.98
Feb 2012	\$5,140	\$5,117	\$5,472	1.00	0.94	\$22,672	\$21,166	\$21,815	0.93	0.97
Mar 2012	\$8,531	\$5,960	\$5,900	0.70	1.01	\$31,203	\$27,126	\$27,715	0.87	0.98
Apr 2012	\$7,735	\$6,351	\$7,469	0.82	0.85	\$38,938	\$33,477	\$35,184	0.86	0.95
May 2012	\$8,906	\$4,481	\$5,425	0.50	0.83	\$47,844	\$37,958	\$40,609	0.79	0.93
Jun 2012	\$7,945	\$6,685	\$6,619	0.84	1.01	\$55,789	\$44,643	\$47,228	0.80	0.95
Jul 2012	\$7,638			0.00		\$63,427			0.00	
Aug 2012	\$6,263			0.00		\$69,690			0.00	
Sep 2012	\$14,932			0.00		\$84,622			0.00	
PTD	\$692,373	\$681,905	\$729,764	0.98	0.93					

**BALANCE OF FACILITIES (BOF)**

<b>Number</b>	<b>Title</b>	<b>Due Date</b>	<b>Status</b>
D-00A-12	Steam Plant Construction Complete	12/31/2012	On-going

The Balance of Facilities (BOF) provides services and utilities to support operation of the main production facilities – PT, HLW, LAW, and LAB. The BOF is 50 percent complete overall, with engineering design 74 percent complete, procurement 49 percent complete, construction 65 percent complete, and startup and commissioning is 9 percent complete.

**Significant Past Accomplishments:**

Oversight efforts are focused on identification of individual facility requirements within BOF to support facility completion and turnover to the startup organization. As necessary to support facility completion, the WTP contractor initiates a weekly or bi-weekly meeting approximately 12 months prior to the scheduled turnover date. The meetings focus on schedule reviews and punch list development for the remaining construction activities. Regular meetings are currently being held for the WTP site switchgear buildings (87 and 91), Chiller Compressor Plant (CCP), and a meeting is currently being established for the Non-radioactive Non-Dangerous Liquid Drains (NLD) facility.

Recent accomplishments for the BOF team are:

- Completed 8 week walk down for WTP switchgear building 87
- Began issuing system flushing sketches for the Plant Service Air (PSA) system and the Plant Cooling Water (CHW) system
- Began excavation for the Potable Water (DOW) tie-in at the PTF and the Sanitary Disposal system (SND) tie-in between the LAB and LAW facilities
- Began installing structural steel for pipe rack connection from the LAB to the LAW facility
- Continued installing PSA system piping in the Glass Former Storage Facility
- Continued installation of pressure safety valves in the CHW and PSA systems for the CCP

**Significant Planned Actions in the Next Six Months:**

- Complete construction of cooling tower
- Complete construction of BOF switchgear building
- Install structural steel for anhydrous ammonia facility
- Turnover WTP Switchgear (Bldg 87) from construction to the startup organization

**Issues:**

No major issues.



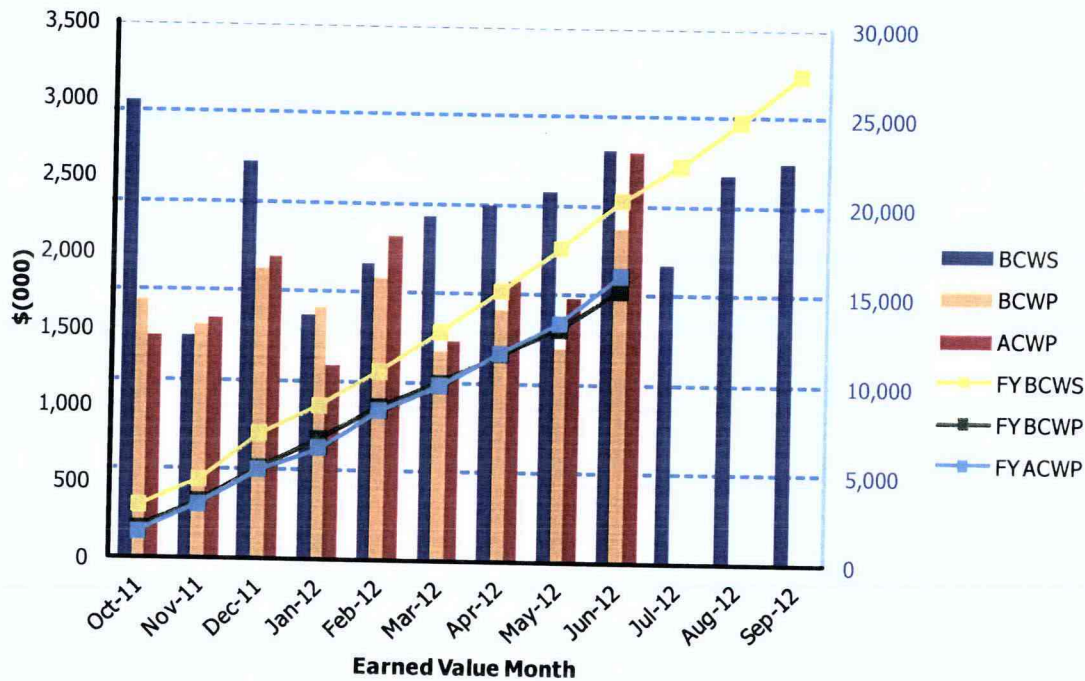
**EXC-01a: Fiscal Year Cost and Schedule Report**

Data Set: FY 2012 Earned Value Data

Data as of: June 2012

**River Protection Project  
Balance of Facilities**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2011	\$2,980	\$1,685	\$1,454	0.57	1.16	\$2,980	\$1,685	\$1,454	0.57	1.16
Nov 2011	\$1,455	\$1,524	\$1,564	1.05	0.97	\$4,435	\$3,209	\$3,018	0.72	1.06
Dec 2011	\$2,594	\$1,895	\$1,981	0.73	0.96	\$7,029	\$5,104	\$4,999	0.73	1.02
Jan 2012	\$1,597	\$1,652	\$1,262	1.03	1.31	\$8,626	\$6,756	\$6,261	0.78	1.08
Feb 2012	\$1,939	\$1,841	\$2,123	0.95	0.87	\$10,565	\$8,597	\$8,384	0.81	1.03
Mar 2012	\$2,248	\$1,376	\$1,444	0.61	0.95	\$12,813	\$9,973	\$9,828	0.78	1.01
Apr 2012	\$2,331	\$1,651	\$1,835	0.71	0.90	\$15,144	\$11,624	\$11,663	0.77	1.00
May 2012	\$2,421	\$1,399	\$1,725	0.58	0.81	\$17,565	\$13,023	\$13,388	0.74	0.97
Jun 2012	\$2,698	\$2,188	\$2,685	0.81	0.81	\$20,263	\$15,211	\$16,073	0.75	0.95
Jul 2012	\$1,950			0.00		\$22,213			0.00	
Aug 2012	\$2,533			0.00		\$24,746			0.00	
Sep 2012	\$2,615			0.00		\$27,361			0.00	
PTD	\$274,106	\$267,322	\$265,130	0.98	1.01					



**ANALYTICAL LABORATORY**

Number	Title	Due Date	Status
D-00A-05	LAB Construction Substantially Complete	12/31/2012	On-going

The Analytical Laboratory (LAB) will support WTP operations by analyzing feed, vitrified waste, and effluent streams. The LAB is 55 percent complete overall, with engineering design 80 percent complete, procurement 77 percent complete, construction 85 percent complete, and startup and commissioning is 10 percent complete.

**Significant Past Accomplishments:**

The LAB team continued to focus on the LAB Construction Substantially Complete milestone. Weekly meetings are held to evaluate construction progress and challenges that arise. Major structures of the building are in place including the interior partition walls which segregate the various analytical stations for LAW sample analysis. Within the individual analytical areas, detail/finishing work continues with emphasis on the installation of commodities to support laboratory cabinets and analytical equipment. Recent accomplishments for the LAB team are listed below:

- Began installing shower/eyewash stations throughout the facility
- Began testing of the Chill Water system
- Continuing RLD system installation in the southeast corner of the facility
- Continued installing hotcell lighting receptacles

**Significant Planned Actions in the Next Six Months:**

- Complete mechanical installation of Autosampling System
- Set pumps in C5 pit
- Install Hot Cell import/export motors
- Progress Analytical Laboratory Construction to "Substantially Complete"

**Issues:**

The LAB schedule was recently affected by an issue concerning valve internals. There is the potential that as many as 275 valves could have had their internal components damaged due to excessive temperatures caused by welding during installation. BNI plans to examine 65 of the valves and base the recovery plan upon the inspection results. While this will delay the goal of early LAB construction completion, there is currently no impact to the Consent Decree milestone (D-00A-05) or contract milestone completion dates.

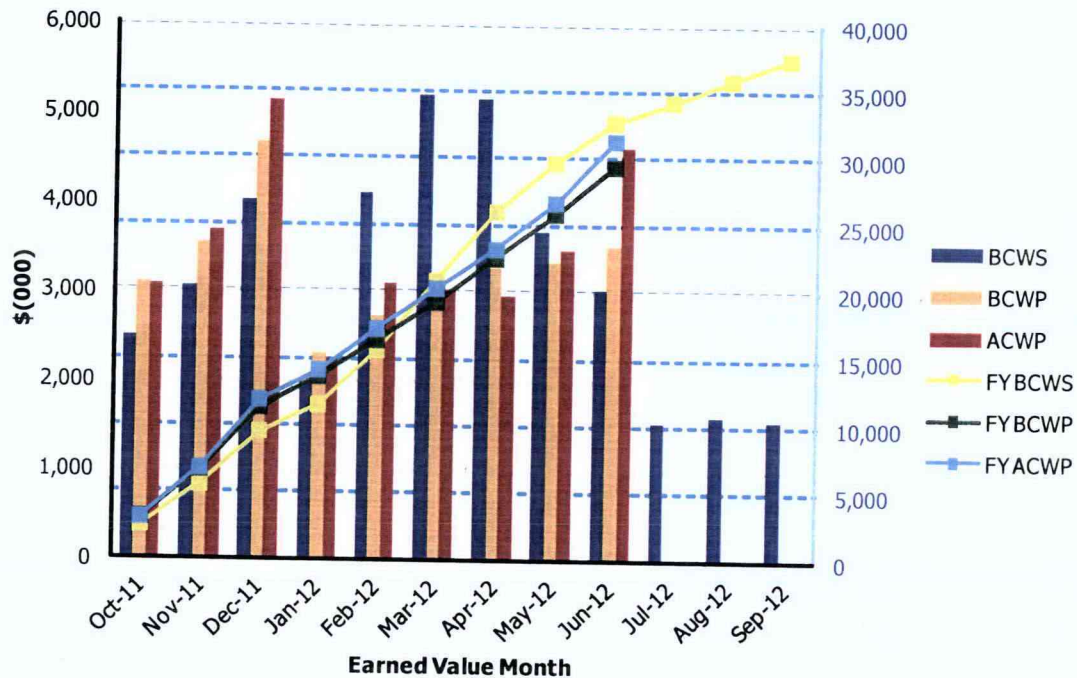
**EXC-01a: Fiscal Year Cost and Schedule Report**

Data Set: FY 2012 Earned Value Data

Data as of: June 2012

**River Protection Project  
Analytical Laboratory**

EVMS Monthly and Fiscal Year Values



Earned Value Month	BCWS	BCWP	ACWP	SPI	CPI	FY BCWS	FY BCWP	FY ACWP	FY SPI	FY CPI
Oct 2011	\$2,489	\$3,092	\$3,063	1.24	1.01	\$2,489	\$3,092	\$3,063	1.24	1.01
Nov 2011	\$3,040	\$3,551	\$3,680	1.17	0.96	\$5,529	\$6,643	\$6,743	1.20	0.99
Dec 2011	\$4,005	\$4,676	\$5,128	1.17	0.91	\$9,534	\$11,319	\$11,871	1.19	0.95
Jan 2012	\$1,970	\$2,318	\$2,242	1.18	1.03	\$11,504	\$13,637	\$14,113	1.19	0.97
Feb 2012	\$4,113	\$2,725	\$3,091	0.66	0.88	\$15,617	\$16,362	\$17,204	1.05	0.95
Mar 2012	\$5,203	\$2,860	\$3,036	0.55	0.94	\$20,820	\$19,222	\$20,240	0.92	0.95
Apr 2012	\$5,167	\$3,265	\$2,954	0.63	1.11	\$25,987	\$22,487	\$23,194	0.87	0.97
May 2012	\$3,685	\$3,349	\$3,486	0.91	0.96	\$29,672	\$25,836	\$26,680	0.87	0.97
Jun 2012	\$3,020	\$3,531	\$4,627	1.17	0.76	\$32,692	\$29,367	\$31,307	0.90	0.94
Jul 2012	\$1,540			0.00		\$34,232			0.00	
Aug 2012	\$1,612			0.00		\$35,843			0.00	
Sep 2012	\$1,572			0.00		\$37,415			0.00	
PTD	\$202,494	\$197,837	\$212,077	0.98	0.93					



## Through June 2012

**Source:** Preliminary WTP Contract Performance Report - Format 1, Data for June 2012

Note: Starting with the June 2009 report, facility construction percent complete values decreased significantly, and a couple of Design/Engineering facility percent complete values went down as well. The decrease in values was tied to Phase I of BNI's elimination of WBS 1.08, Plant Wide EPC; scope from WBS 1.08 was moved to facilities as appropriate or to WBS 1.90, Shared Services. This resulted in an increase in the facility construction budgets, which has correspondingly reduced the to-date percent complete values. In July 2010 the allocation of 1.90 to the facilities was removed to show true facility percent complete. This report does not show the LOE budgets that are not associated with a specific EPC function; these include, Finance, Project Management, etc, but are included in the total Overall Facility Percent Complete for Shared Service.



## ORP/Ecology TPA and CD Agreements, Issues, and Actions

### August 2012

#### Agreements:

1. Meetings for resolution of comments for M-45-101(Component ID and Closure Strategy) are on-going. ORP and ECY aim to reach final resolution by 08/31/12.
2. ORP will continue to meet with ECY to discuss funding and work priorities per TPA Paragraphs 148/149 process.
3. Per an ECY standing request, ORP agrees to include any written directives given by DOE to the contractors for work required by the CD in future Semi-Annual CD Reports (see CD Section IV-C-1-e, page 8).
4. The ORP and ECY PMs have developed, signed, and entered an outline for the CD Tank Completion Certification into the TPA Administrative Record. Senior management will continue to be briefed if any follow-on actions arise.

#### Issues:

1. Ecology has a concern with WTP data being reported exclusively in the CD Monthly Summary Report as the current CD reporting process does not allot ECY early review time of the CD Monthly Summary Report. ORP and ECY have raised this concern for discussion at the Senior Management levels.
2. Ecology would like to see a detailed schedule or timeframe for the path forward for a deliverable of the System Plan milestone – specifically TPA Milestone M-062-40ZZ, the submittal of a one-time Tank Waste Supplemental Treatment Technologies report if a supplemental treatment technology is proposed other than a 2<sup>nd</sup> LAW, which is due on 10/31/2014.

#### Actions:

1. ORP is incorporating comments for the change notice for M-045-92B specific to monitoring plan, scope, and schedule for TY Barrier. Actionee: Chris Kemp/Susan Eberline. **Open.** ORP plans to meet with Ecology one final time to ensure all comments are incorporated before completing this action.
2. ORP will brief ECY on soil sample analysis from direct push for the C-101 and C-104, including discussion of vadose zone data for the C-101 TWRWP, post May 2012. Actionee: Chris Kemp/Susan Eberlein. **Open.** Data to be transmitted via a letter and CD with various documents (estimated end of August completion of this letter and CD).
3. ECY will provide approval or other action on the M-045-58 workplan. Actionee: Jeff Lyon. **Open.**
4. ORP is working on an ECY request to revise IQRPE reports for ARRA projects. Actionee: Chris Kemp/Jeremy Johnson. **Open.** A meeting to review the IQRPE's disposition of ECY's comments was held on 05/24/12. ORP transmitted letter 12-TF-0025 with several revised reports.
5. ORP will provide information to ECY (Lyon) on Mixer Pump work for Waste Feed Delivery. Actionee: Glyn Trenchard. **Open.**
6. ORP and WRPS will develop and provide to ECY a C-108 Lessons Learned for use in future caustic dissolution activities. Actionees: Chris Kemp/Jeff Luke/Susan Eberlein. **Open.**

## ORP/Ecology TPA and CD Agreements, Issues, and Actions August 2012

7. Per 12-NWP-071, ECY anticipates the following actions are necessary to support the completion of the RCRA RFI/CMS Study work:
    - a. ORP will release the revisions of RPP-39114 and RPP-38777 as approved.
    - b. ORP will complete work identified in the work plan.
    - c. ORP will provide the date for submittal and completion of:
      - i. The validation, documentation, and evaluation of the analytical data from FY2010 and FY2011
      - ii. The following reports:
        1. Tc-99 laboratory interferences
        2. Evaluation of the organic detects in WMA C groundwater wells
        3. Latest trending of groundwater contaminants at WMA C groundwater wells
        4. Evaluation of the Quality Assurance/Quality Control and holding time issues associated with the 222-S shutdown in summer of 2011
    - d. ORP will submit the revised Hanford C-Farm Leak Assessment Report (RPP-ENV-33418)
- Actionee: Chris Kemp. **Open.** Several actions/data to be transmitted via a letter and CD with various documents (estimated end of August for completion of this letter and CD). After Ecology receipt and initial review, follow-on items, comment resolution, and further discussion will be needed to fully complete all actions.
8. ORP will setup a meeting with someone from 222-S Labs to brief Ecology on sampling and process/tracking information at the lab. Actionee: Jeff Cheadle. **Open.**
  9. ORP will setup a meeting to discuss C-108 leeching tests/sampling. Actionee: Chris Kemp/Mike Barnes. **Open.**

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**Recent Items Entered/To Be Entered into the TPA Administrative Record** (see <http://www5.hanford.gov/arpir/?content=advancedSearch> - search EDMC File Number)

Item Description	TPA/CD Topic Milestone Tie	TPA Admin Record – EDMC File Number
July 2012 ORP CD Monthly Report	All	1215634
July 2012 ORP TPA Monthly Report	All	1215635
July 2012 ORP TPA M-062-01 Semi-Annual Report	M-062-01Y	1215741
July 2012 ORP CD Semi-Annual Report	D-00C-01E	1215742
Meeting Notes for Annual Meeting for Interim Measures (per M-045-56) held on 06/21/12, signed 08/14/12.	M-045-56H	1216063